The Stout Institute Bulletin

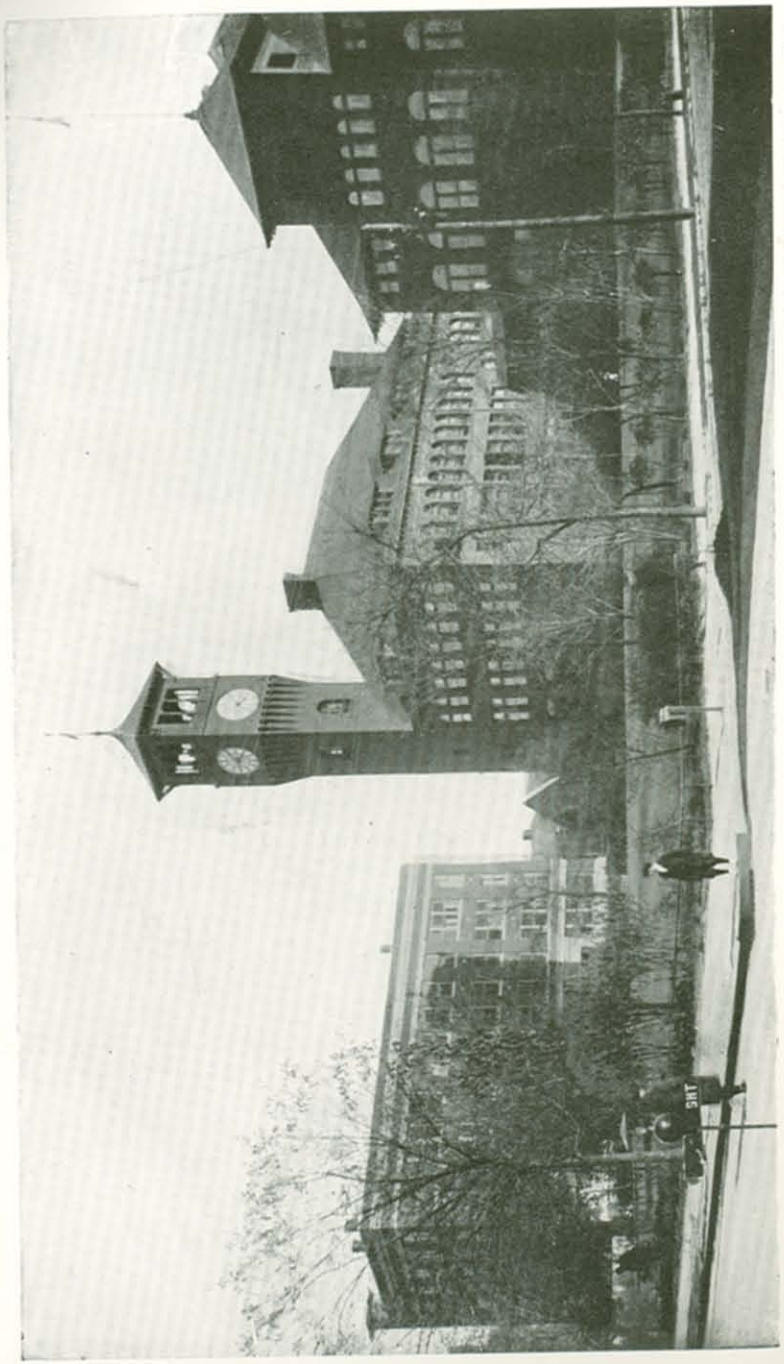
Twenty-first
Annual Catalog
1923 - 1924

Menomonie, Wisconsin

1/18

THE STOUT INSTITUTE BULLETIN

ANNOUNCEMENT
1923 - 1924



STOUT INSTITUTE BUILDINGS, SHOWING HOME ECONOMICS BUILDING AT LEFT, GYMNASIUM IN THE REAR, INDUSTRIAL ARTS BUILDING IN THE CENTER. THE BUILDING AT THE RIGHT IS THE PUBLIC HIGH SCHOOL. THE TRADES BUILDING IS NOT SHOWN.

THE STOUT INSTITUTE BULLETIN

GENERAL INFORMATION
AND COURSES OF STUDY FOR THE
SCHOOL YEAR, INCLUDING
SUMMER SESSION

1923-1924

ANNOUNCEMENT

FOR THE TWENTY-FIRST ANNUAL SESSION
AND EIGHTEENTH SUMMER SESSION

OF

THE STOUT INSTITUTE

MENOMONIE, WISCONSIN

1923-1924

OFFICERS OF ADMINISTRATION

BURTON E. NELSON, President of The Stout Institute.
CLYDE A. BOWMAN,
Director of Industrial Arts School and Summer Session.
DAISY ALICE KUGEL, Director of Household Arts School.
GEORGE F. MILLER, Director of Physical Education.
GRACE M. DOW, Director Bertha Tainter Hall.
MABEL H. LEEDOM, Preceptress Tainter Hall Annex
DELLA A. PAINE, Director of Cafeteria.
MARJORIE BEAL, Librarian.
CHRISTINE HALSETH, Assistant Librarian.
B. M. FUNK, Business Manager.
J. T. BURNS, Engineer.
ADELAIDE C. FRENCH, Secretary.
ADALIN W. MACAULEY, Registrar and Appointment Clerk.
RUTH KIENZLE, Stenographer.
ELIZABETH A. CLARK, Stenographer.

BOARD OF TRUSTEES

Ex-Officio Members:

JOHN CALLAHAN, State Superintendent of Schools, Madison.

L. A. TARRELL, State Industrial Commissioner, Madison.

Employer Members:

E. W. SCHULTZ, Sheboygan.

R. S. COOPER, Kenosha.

E. J. KEARNEY, Milwaukee.

Employee Members:

A. W. MCTAGGART, Superior.

J. H. MCQUAID, Milwaukee.

OLIVER ELLSWORTH, Oshkosh.

Agricultural Members:

F. W. PLOETZ, Coloma.

GEORGE F. COMINGS, Eau Claire.

MILES L. HINEMAN, Tomah.

Secretary:

GEORGE P. HAMBRECHT, Madison.

CALENDAR FOR 1923-1924

Eighteenth Annual Summer Session begins June 25, 1923.

Summer Session ends August 24, 1923.

Twenty-first Regular Session begins September 10, 1923.

Holiday Vacation begins December 22, 1923.

Classes Resume January 7, 1924.

First Semester ends January 25, 1924.

Second Semester begins January 28, 1924.

Twenty-first Regular Session ends May 30, 1924.

FACULTY

INSTRUCTORS FOR THE SCHOOL YEAR

BURTON E. NELSON, President.

Pennsylvania State Normal School, 1884; B. S., Western Normal College, 1891; M. A., 1895; Teacher rural schools, four years; High School Principal, eleven years; City Superintendent, Lincoln, Illinois, four years; City Superintendent, Racine, Wisconsin, fourteen years; President, The Stout Institute, 1923.

KATHRYN BELE, General Chemistry, Cookery.

Stout Institute Diploma, 1917; Stout Institute B.S. in Household Arts, 1921; Summer Sessions, University of Minnesota, 1917 and 1920. Teacher in Public Schools, 1917-1919. Stout Institute, 1920.

CLARA LOUISE BOUGHTON, Supervision of Practice Teaching in Foods.

State Normal School, Milwaukee, 1890-1893; Stout Institute Diploma, 1910; Stout Institute B.S. in Household Arts, 1921. Teacher in Public Schools, Manitowoc, 1893-1909; Director of Domestic Science, Racine, 1910-1911; Stout Institute, 1911-

BERTHA BISBEY, Nutrition (Absent 2nd Sem. 1922-23.)

Kansas State Normal, 1893-1894; University of Chicago, Summer Sessions, 1908, 1919; The Stout Institute, Diploma, 1912; Columbia University, B.S. 1921. Teacher in Public Schools, Alma, Kansas, 1900-1903; Manhattan, Kansas, 1903-1908; Instructor in Mathematics, Kansas State Agricultural College, 1908-1910; The Stout Institute, 1912-1920 (leave of absence 1920-21) The Stout Institute, 1921-

CLYDE A. BOWMAN, Administrative Problems, Organization of Industrial Arts.

River Falls, Wis., State Normal, 1907; Stout Institute, January, 1909; Columbia University Bachelor of Science Degree and Professional Diploma in Supervision of Indusrtial Arts, 1915; Graduate Work Columbia University, 1916, 1919; Summer Sessions Stout Institute, 1907, 1908, 1909, 1911, 1913; University of Wisconsin, 1912; Columbia University, 1915. Shop Instructor, El Paso, Texas, 1909; Director Manual Arts, City Schools, Stillwater, Minnesota, 1909-1911; Director Department Manual Arts, State Normal, Stevens Point, Wisconsin, 1911-1914, 1915-1916. (Leave of absence 1914-1915); Instructor and Associate Adviser in Industrial Arts, Teachers College, Columbia University, New York City, 1916-1919 (leave of absence while in the Service); Stout Institute, 1919.

MURIEL BRASIE, Clothing, Interior Decoration.

Stout Institute, Diploma, 1916; Teachers College, Columbia University, diploma and B.S. degree 1922. Instructor in Dressmaking, Virginia Irwin Memorial School, Quincy, Illinois, 1917-1918; Instructor in Home Economics and Toy Making, Country Home for Convalescent Children, West Chicago, Illinois, 1918-1920. Stout Institute, 1922-

ARTHUR G. BROWN, Psychology, Elements of Woodwork, Basketball Coach.

Macalester College, 1914, B.S.; Stout Institute, Summer Session, 1914; University of Chicago, Summer Session, 1919. Instructor of Manual Arts and Athletic Coach, City Schools, Le Sueur, Minnesota, Two Years, and City Schools, Bottineau, North Dakota, One Year; Director of Athletics and Head of Department of Manual Arts, Forestry State Normal School, Bottineau, North Dakota, Four Years. Stout Institute, 1920.

FRED L. CURRAN, Supervision of Practice Teaching, Teaching Industrial Arts, Vocational Education, Modern Industry.

State Normal School, Stevens Point, Wisconsin, 1905; Stout Institute, 1909; Bradley Polytechnic Institute, Summers, 1908, 1909. Teacher in Public Schools, 1898, 1903; Principal State Graded Schools, 1905-1907; Stout Institute, 1908-

GRACE M. DOW, Institutional Organization and Administration.

St. Paul Teachers' Training School, 1897; University of Minnesota Summer Session, 1910; Stout Institute, 1911. Teacher in Public Schools, St. Paul, 1897-1898; Stout Institute, 1911-

ETHEL FELDKIRCHNER, Household Management, Supervision of Practice Cottage.

Stout Institute, Diploma, 1916; University of Chicago, Ph.B., 1920. Teacher of Household Arts, Winnetka, Illinois, 1916-1919. The Stout Institute, 1919-

RACHEL GILBERT, Physiology and Hygiene.

Stout Institute, Diploma, February, 1920; University of Minnesota, B.S. 1922; Graduate Work, University of Minnesota, one semester 1922-1923. Teacher of Home Economics, Truman, Minnesota and Santa Rita, New Mexico. Assistant Chief Dietitian, U. S. Public Health Service, Hospital, Fort Bayard, New Mexico, 1921. Stout Institute, 1923-

DAVID W. FIELDS, History, Psychology, English, Citizenship, Track Coach.

University of Illinois, A.B., 1922; University of Illinois Summer Session, 1922; The Stout Institute, 1922-

H. F. GOOD, Auto Mechanics, Electrical Work. Materials of Construction.

Iowa State College, B.S. in Electrical Engineering, 1913; B.S. in Agricultural Engineering, 1914. Instructor in Agricultural Engineering, Dunn County School of Agriculture, 1914-1918; Special Training in Gas Engines, Tractors, and Automobiles, with Four Years of Practical Experience; Foreman of Construction Work in Electric Railway Shops one and one-half years. Stout Institute, 1918-

C. W. HAGUE, Printing.

Practical Printer, Seven Years Experience. Hamline University, 1912-1913; University of Wisconsin, Summer Session, 1915; Lawrence College, 1914-1917, B.A. Degree. Seven Weeks at Intertype Factory School, Brooklyn, N. Y., Summer 1922, Certificate. One Year's Experience Teaching Drafting and Applied Mathematics for Electricians, School of Engineering of Milwaukee; One Year as Instructor of Printing, Vocational School, Appleton, Wisconsin; U. S. Radio School, Harvard University, Cambridge, Massachusetts, 1918; Stout Institute, 1919-

H. M. HANSEN, Advanced Woodwork.

Stout Institute, 1915. University of Wisconsin, Summer Session, 1919. Forest Products Laboratory, Special Course, 1920. Building Trades Experience 16 years; (Knapp Stout Lumber Company one year. Carpentry, two years. Sash and Door, Planing Mill and Cabinet Work, four years. Patternmaking and Machineshop, one year. Drafting, one year. In the Contracting Business six years. Building Superintendence, one year). Vocational School Instruction, (Saturdays) two years. Stout Institute, 1912-

LAWRENCE HURST, History and Economics.

Indiana State Normal School, Diploma, 1908; Indiana University, A.B., 1910; Columbia University, Summer Session, 1912; Wisconsin University, M.A., 1914; Illinois University, 1914-1915. Principal High School, New Harmony, Indiana, 1910-1912; Acting Instructor of History, University of Colorado, 1915-1916; Head of Department of Social Science, Springfield, Illinois, High School, 1916-1918; the same at Covington, Kentucky, High School, 1918-1919; Stout Institute, 1919-

FLOYD KEITH, Woodturning, Sheet Metal, Elementary Forging.

River Falls Normal, diploma advanced course, 1915; Stout Institute, B.S. Degree, 1922; Three Summers Playground Work, Winnipeg; Five Years Wisconsin High Schools; Stout Institute, 1922-

RUTH C. KLEIN, English, Public Speaking.

Wisconsin University, B.A., 1914. Teacher of English, Ashland, Wisconsin, 1919-1920; Muskogee, Oklahoma, 1920-1921; The Stout Institute, 1921-

DAISY ALICE KUGEL, Organization of Home Economics, Principles of Education, Principles of Teaching.

University of Michigan, A.B., 1900; graduate study University of Michigan, 1901; Columbia University, B.S. and Diploma, 1908; graduate study University of Chicago, Summer Session, 1919. Teacher in public schools, 1902-1906; Instructor in Home Economics, Chautauqua, New York, Summer, 1911; Instructor in Cookery and Dietetics, The Stout Institute, 1909-1912; Director of Household Arts Department, The Stout Institute, 1912-

FANNIE KUGLE, Millinery.

Twenty years experience in trade work in Millinery. The Stout Institute, Summer Session, 1922-

MABEL H. LEEDOM, Chemistry.

City Normal School, Dayton, Ohio, 1894; Stout Institute Diploma, 1910; Columbia University, Summer Session, 1913; Teachers College, Columbia University, B.S., 1919; Graduate study, Columbia University, summer session, 1920. Teacher in Public Schools, Dayton, Ohio, 1895-1905; Stout Institute, 1910-1918; 1920-

JEANETTE LITTLEJOHN, Chemistry.

University of Arkansas, B.A., 1921; Iowa State Agricultural College, Ames, Iowa, M.A., 1923. Graduate Assistant in Chemistry Department, Iowa State College, 1920-1922. Stout Institute, 1923-

MARY M. MCCALMONT, Chemistry.

Westminster College, New Wilmington, Pennsylvania, B.S.; Graduate Student, University of Omaha, Nebraska, 1911; University of Wisconsin, 1911-1912, M.S., 1921; Teacher in Public Schools, 1906-1907; Principal of High School and Supervisor of Music, Woodville, Ohio, 1907-1909; City Schools, Omaha, Nebraska, 1909-1911; Stout Institute, 1912-

MARY I. MCFADDEN, Psychology, Sociology.

State Normal School, Oshkosh, 1897; University of Wisconsin, Ph.B., 1900; A.M., 1907; University of Chicago, Ph.M., 1901; Teachers College, Coulmbia University, January 1908-June 1908. Teacher, Grand Rapids High School, 1891-1892; Principal Menomonee Falls High School, 1892-1893; Assistant Principal Oconto High School, 1893-1895; Associate Supervisor of Practice, Oshkosh Normal School, 1901-1906; Acting Assistant Professor of Education, University of Kansas, One Semester, 1906-1908; Principal Muskegon City Normal School, 1909-1910; Supervisor of Practice, Teacher of Pedagogy and Music, Sauk County Training School, 1911-1912; Stout Institute, 1912-

ANNA MCMILLAN, Clothing, Costume Design, Millinery.

Stevens Point Normal, Diploma; Stout Training School, Diploma, 1908; Teachers College, Columbia University, B.S., 1915. Teacher Public Schools in Wisconsin; Teacher Stout Institute, 1909-1914; Assistant Teachers College, 1915-1916; Director Textiles and Clothing, Lewis Institute, 1916-1919; Stout Institute, 1919-

MARY BURT MESSER, Home and Social Economics.

Vassar College, 1901-1902. Teacher in McKinley High School, Washington, D. C., 1902, 1903; Head of English Department, Washington College, 1907-1910; Social Worker in Association for Improving the Conditions of the Poor, New York, 1911, 1912; Investigator of Charitable Institutions for Charity Organization Society, New York, 1912-1915; Stout Institute, 1916-

MARTHA L. METCALF, Cookery, Food Study.

Teachers College, Diploma, 1908; Teachers College B.S., 1914; Columbia University Summer Sessions, 1918, 1919, 1920, 1921. Teacher in Indianapolis Public Schools, 1908-1913; Head of Home Economics Department, State Normal School, Moorhead, Minnesota, 1914-1918; Supervisor of Home Economics in Public Schools, Flemington, New Jersey, 1918-1921; The Stout Institute, 1921-

GEORGE F. MILLER, Physical Training, Swimming and Athletics.

Normal College, N.A.G.U., Indianapolis, 1912; School for Athletic Coaches, University of Illinois, 1913; Diploma Harvard University School of Physical Education, 1914. Camp Athletic Director, 31st Division, Camp Wheeler, Macon, Georgia, Summer, 1917; School for Athletic Coaches, University of Wisconsin, 1918; Lecturer on Football, Normal College, Indianapolis, 1919; Athletic Director, Evansville, Indiana, Junior and Senior High School, 1912-1917; Stout Institute, 1917-

H. C. MILNES, Machine Shop Practice, Foundry Work, Patternmaking.

Armour Institute, 1904-1906; Columbia University, Summer, 1909; Chicago University, Summers, 1910, 1911; Four Years' Practical Work in Machine Trades. Teacher of Manual Arts, Evansville, Indiana, 1909-1916; Stout Institute, 1916-

MAMIE RUSSELL MUTZ, Interior Decoration, Color and Design.

State Normal, Peru, Nebraska, Diploma, 1904; University of Chicago, 1907-1908, Ph.B., 1916; Student Art Institute, Chicago, Saturday classes, 1907-1908; Applied Arts Summer School, Chicago, 1920; California School of Fine Arts, 1922-1923; State Normal, Peru, Nebraska, Critic, 1905-1907; Supervisor of Art, Training School, 1908-1911; Director Department of Art, 1911-1922; Colorado State Teachers College, Art Department, Spring and Summer, 1922; Stout Institute, 1923-

E. J. NEARY, Auto Mechanics, Shop Mathematics, Assistant Coach.

Kalamazoo, Michigan, High School, 1913; Western State Normal School, 1915. Five years Practical work in Auto Factories; One Year Assistant to Engineer, Great Western Auto Co.; Stout Institute, 1919-

DELLA A. PAINE, Cafeteria Management.

Baraboo Business College, Diploma, 1897; Whitewater State Normal, Diploma, 1901; The Stout Institute, Diploma, 1916. Teacher and Ward Principal of Public Schools, Marinette, Wisconsin, 1901-1909; Teacher in Public Schools, Baraboo, Wisconsin, 1909-1914; Lewis Hotel Train-

ing School diploma, 1921; Teacher of Cookery, Vocational School, Eau Claire, Wisconsin, 1916-1917; Cafeteria Director of Young Women's Christian Association, St. Paul, Minnesota, 1917-1921; The Stout Institute, 1921-

RUTH MARY PHILLIPS, English Composition, Literature.

University of Wisconsin, B.A., 1904; Graduate Work, University of Wisconsin, 1905, and one Semester, 1909; Teacher in High School, Lodi, Wisconsin, 1904-1905; Teacher in High School, Black River Falls, Wisconsin, 1906-1910; Stout Institute, 1910-

FLORENCE QUILLING, Clothing, Hygiene.

Stout Institute, Diploma, 1911; Chicago University, Summer Sessions, 1915; Stout Institute, B.S. in Household Arts, 1920. Teacher in Public Schools, 1911-1917; County Home Demonstration Agent, Iowa, 1917-1918; Stout Institute, 1920-

J. E. RAY, Architectural Drafting, Bricklaying and Concrete Work.

Williamson Trade School, 1908; Stout Institute and University of Wisconsin Summer Sessions, 1917 and 1918; Stout Institute, 1917; B.S., 1922. Seven Years' Experience as a Journeyman and Foreman Bricklayer in New York, Pennsylvania, New Jersey, Texas, Louisiana, Arizona, California, Michigan and Wisconsin. Stout Institute, 1914-

FLORENCE I. SCOULAR, Cookery.

The Stout Institute, B.S., 1919; Summer Sessions, University of Chicago, 1919, Applied Arts Summer School, Chicago, 1920. Instructor in Home Economics, State Normal School, River Falls, Wisconsin, 1919-1920; Supervisor of Household Arts, Ironwood, Michigan, 1920-1922; The Stout Institute, 1922-

MARGARET M. SKINNER, Directed Reading.

University of Wisconsin, B.A., 1912, Graduate Work 1914 and Summer Sessions; Teacher of English in High School, Berlin, Wisconsin, 1912-1913; Teacher of English and Critic Teacher in Demonstration High School, School of Education, University of Wisconsin, 1913-1920; Head of English Department, High School, Janesville, Wisconsin, 1920-1921; Stout Institute, 1921-

EDITH SLEEPER, Physical Training.

Chicago Normal School Physical Training, 1915-1916; Michigan State Normal College, Ypsilanti, Michigan, Life Certificate and Diploma in Physical Education, 1918. The Stout Institute, 1923-

FLORA SNOWDON, Clothing, Textiles.

City Normal School, Dayton, Ohio; Summer Schools, Chautauqua, New York; Cook County Normal School, Chicago; Martha's Vineyard, Massachusetts; Teachers College, Columbia University, B.S. and Diploma in Household Arts Education; University of Chicago, January-August, 1919; Teacher in Grade Schools and City Normal School, Dayton, Ohio; Teachers College, Kirksville, Mo., 1913-1918; Stout Institute, 1919-

H. C. THAYER, Machine Drawing, Machine Shop Practice.

Highland Park College, Mechanical Engineering, 1906-1909; Summer Sessions, State Manual Training Normal, Pittsburg, Kansas, 1914-1915; Summer Sessions, University of Chicago, 1916-1917, 1919-1920, and Regular Year, 1919-1920. Instructor in Shop Work and Drawing, Central High School, Muskogee, Oklahoma, 1913-1916; Instructor in Shop Work, Central High School, Binghamton, New York, 1916-1918; (Leave of Absence to Inspection Division, Ord. Dept.) Stout Institute, 1920-

F. E. TUSTISON, Mathematics, Science, Home Mechanics.

Graduate Ohio Wesleyan University, 1909; B.S. Summer Session of Chicago University, 1916; Summer Session, Case School of Applied Science, 1917; Practical Experience in Electrical Installation, Motor Testing, and Cabinetmaking. Director of Gymnasium of Shattuck Military Academy, 1909-1910; Instructor of Science, Somerset High School, 1910-1920; Acting Superintendent of Somerset City Schools, 1919; Stout Institute, 1920-

MRS. HARRIET P. VINCENT, Supervision of Infirmary.

Training in Cleveland, Ohio; Special Work in Boston; Five Years' experience in teaching Home Nursing and in charge of Dispensary in Andrews Institute, Willoughby, Ohio; Stout Institute, 1919-

LETTY E. WALSH, Supervision of Practice Teaching in Clothing.

B.A., Iowa State Teachers College, 1915; M.A., and Supervisor of Household Arts Diploma, Columbia University, 1920; Graduate Study, University of Chicago, Summer Session, 1917. Supervisor of Practice Teaching in Home Economics, Iowa State Teachers College, Cedar Falls, Iowa, 1915-1919. Stout Institute, 1920-

R. L. WELCH, Forging and Sheet Metal Work.

James Millikin University, Department of Engineering, 1908-1911; Department of Industrial Education, 1914-1915; Stout Institute, Summers, 1916, 1917; Bradley Polytechnic Institute, Summer, 1919; Practical Experience in the Metal Trades. Director of Industrial Arts, Somerset, Kentucky, City Schools, 1915-1916; Instructor of Mechanical Engineering, South Dakota State College, 1916-1918; Stout Institute, 1919-

LOUISE WILLIAMS, Microbiology, Hygiene and Home Nursing, (Absent 2nd Sem. 1922-23.)

McGill University, 1907; B.A. and Diploma from McGill Normal School; Columbia University, M.A., 1911, and Master's Diploma in Teaching of Biological Science, Teacher's College, 1911. Teacher of Classics and Science, Dunham College, Quebec, 1907-1909; Stout Institute, 1911-

A. R. WILSON, Elements of Woodwork, Woodfinishing.

University of Illinois, "Industrial Education," B.S., 1921; Teacher in Hall Township High and Vocational School, Spring Valley, Ill., 1915-1917; Champaign High School, Champaign, Illinois, 1917-1920; Summer Session, University of Illinois, 1920; Stout Institute, 1921-

GENERAL INFORMATION

REGULAR SESSION, 1923

The Stout Institute is an institution supported by the State of Wisconsin to prepare teachers of the industrial and household arts. For this purpose there are provided four large, thoroughly equipped buildings, the Household Arts Building, the Industrial Arts Building, the Gymnasium, and the Trade Building. In addition there are also dormitories and a practice cottage and infirmary. The institution represents an investment of over a million dollars.

BUILDINGS AND EQUIPMENT

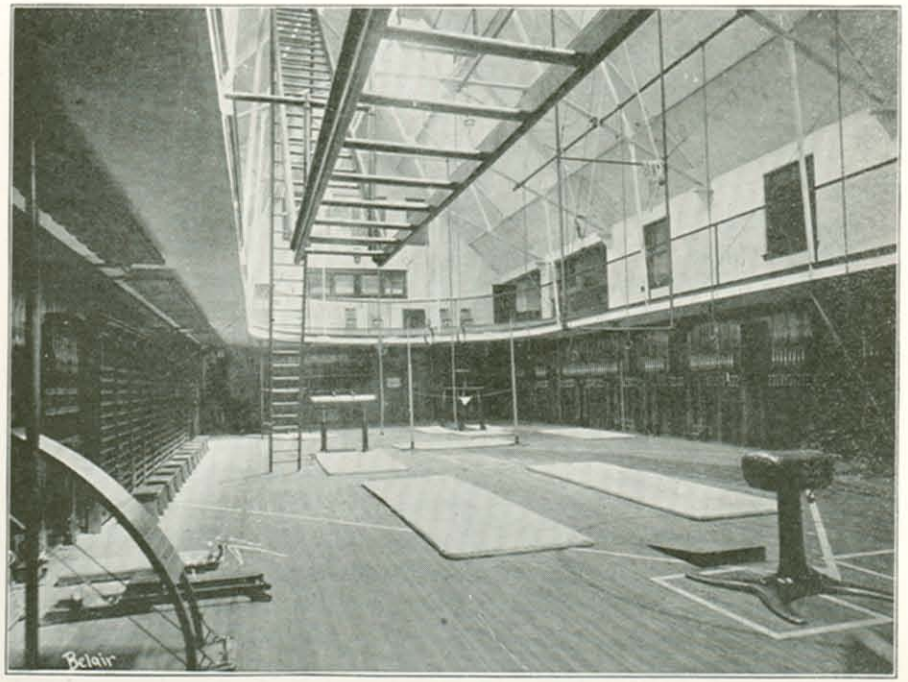
Industrial Arts Building

The first building to be erected of the group now used for instruction was the Industrial Arts building. It is four stories high, with light basement containing engine room, storage and work rooms. The ground floor plan is extended to a total area of 76 by 182 feet, and the annex contains the machine shop, forge shop, and foundry. All of these shops are well equipped.

The first floor contains wood turning shop, patternmaking shop, demonstration room, and department offices. The second floor contains the print shop with connecting rooms, lecture room, exhibit room and home mechanics shop. The third floor contains two drawing rooms, large lecture room, electrical wiring shop, and physics laboratory.

The fourth floor is given over entirely to an armory and basketball floor. It has a steel arch trussed roof, providing a full area the size of the main building free from obstructions such as columns or partitions. Seats are banked up at the sides, accommodating eight hundred people conveniently.

THE STOUT AUDITORIUM



THE STOUT GYMNASIUM

Gymnasium and Natatorium Building

The second building erected in this group was the School of Physical Training. The building is 66 feet by 132 feet, and three stories in height. It contains a very completely equipped gymnasium with running track, measuring room, locker rooms, recreation room, and bowling alleys on its west side. Its east side is given over largely to baths and contains a swimming pool, 37 by 87 feet, showers, and a well-arranged series of rooms for Russian and Turkish baths. There are also locker rooms, dressing rooms, and social rooms in the east side of the building. The physical director's office is located near the main entrance.

On the second floor of this building is The Stout Institute Club Room, designed to foster social pleasures and good fellowship among the faculty and the students. This large room is furnished with pictures, a piano, reading material, a victrola, tables, chairs, games, an electric plate and dishes. This recreation center is open daily; and in addition Friday evening, Saturday afternoon, Saturday evening, and Sunday afternoon. With the aid of The Student Welfare Committee, the various school organizations supervise the Club Room and its activities. The Athletic Council meets in this building. This council is made up of the athletic director, two other faculty members, and two representatives from each of the classes of students. Each class selects one representative from each department. On the third floor are the Y. W. C. A. and Y. M. C. A. rooms.

Building Trades Building

The third building erected for Stout classes was that given over to shops for teaching the building trades. It is 84 by 175 feet and two stories in height. A basement at one end of the building is entirely above grade level and contains the carpentry shop, 36 by 80 feet. The ceiling of this shop is over twenty feet high and the shop is so constructed that a section of the outside wall, 27 by 20 feet, may be removed, making it possible to move a completed building directly to its proper site. At one end of the shop is a lecture balcony. At the other is a lumber balcony. A moist air dry kiln opens from the lumber balcony and extends into the mill, which adjoins the carpentry shop. The mill is very completely equipped with modern woodworking machinery.

A cabinetmaking shop is connected with the mill and provided with heavy benches, veneer press, sash and door clamp, and a

complete glue room. The auto mechanics shop, located in the next room is equipped with gasoline engines, automobile motors, burning and running-in machine, lathe, reboring machine, etc., for handling complete auto repairs. The bricklaying shop in the next room is being temporarily used for overflow auto mechanics work. The sheet metal shop on the second floor above the auto shop has a complete equipment, including cornice brake, circular shear, burring, turning, and beading machines and proper stakes necessary for carrying on a complete course in sheet metal work.

A middle entrance leads to the second floor corridor and opens onto a conveniently arranged lecture room. A large shop on this floor is given over to painting and wood finishing, with a varnishing room and fire-proof storage for finishing supplies connected. Two large rooms are equipped for architectural and machine drafting and contain an electric blue-printing outfit.

Elementary manual training is taught in a room especially planned for this work, opening upon this corridor. In addition to its necessary tools and benches, it contains several exhibits and conveniences of interest to the teacher of elementary work.

Household Arts Building

The last building erected at Stout was planned principally for household arts classes. It is 126 by 228 feet and four stories in height, with a high basement. Two large elevators are provided for students' use, one at each end of the main corridor. They add greatly to the comfort and convenience of those taking work in foods or science.

The Stout Institute library is located in this building on the main floor in the west wing. The room is large, well-lighted, and well-ventilated. In addition to the reading room, there is a magazine alcove, stack room, conference room, cataloging room, and repair room.

The general offices are located on the first floor and include the president's office, and those of the secretary, clerks, business manager, registrar, and telephone operator. Department offices, reception room, exhibit room, and recitation rooms are also located on this floor.

The Auditorium, located in the east wing of the building, extends up for three stories, with a seating capacity for 800. It is thoroughly equipped as a modern theatre with stage 23 by 50 feet, proscenium arch 32 by 24 feet, decks, fly galleries, and scene loft 50 feet high. There are the usual dressing rooms and lava-

tories, and a stage switchboard controlling all stage and house lights.

The stage equipment includes asbestos drop, picture screen, and both interior and exterior scenery. Special settings for the stage for use in concerts and for lecture work have been built by Stout students. Attention has been given to acoustics as well as to the decorative effect of such settings. A picture booth contains both stereopticon lantern and motion picture machine. Fire exits have been provided in all directions and are properly illuminated. Six doors open up at the rear for general exit.

Clothing, millinery, textiles, and dressmaking rooms occupy most of the second floor. They are supplemented by lecture rooms, fitting rooms, and offices.

Food and dietetics laboratories occupy most of the third floor, and are supplemented by dining rooms, pantries and lecture rooms. Several types of kitchen arrangement have been installed in order to illustrate the advantages of each for public school installation.

Science laboratories occupy most of the fourth floor. These are well-equipped, well-ventilated, and well-arranged. This floor also contains rooms for color and design, interior decoration, a large lecture room and smaller lecture rooms. A general refrigerating system takes care of this floor as well as the third.

PURPOSE AND ORGANIZATION

The school is organized primarily to prepare teachers, supervisors and directors of the industrial arts and of the household arts subjects. For administrative purposes there are two coordinated departments, each taking care of its particular problems.

Students preparing for teaching in these fields are given a thorough grounding in the practical subjects of the industrial and household arts, related sciences, pedagogical subjects, English, economics, history and sociology. Every course has been organized with the definite purpose in mind of preparing teachers who shall know their subjects, and be able to teach them, and furthermore have an understanding and an appreciation of the larger aspects and responsibilities of their work.

VOCATIONAL EDUCATION

The Stout Institute has been designated by the State Board of Vocational Education as the training school for vocational teachers of trade and industrial subjects, and the first two years of the four-year course, with some modifications to meet the special requirements for vocational teaching, as the course of study for such teachers. Special courses are offered for directors and teachers of vocational schools during the summer session.

LOCATION

The Stout Institute is located in the City of Menomonie, in western Wisconsin, sixty-six miles east of St. Paul, on the Chicago and North Western Railway. Menomonie is also connected with Mississippi River points by the Chicago, Milwaukee & St. Paul Railway.

COURSES

Courses are offered in both departments leading to the Bachelor of Science degrees in Industrial Arts and Household Arts. These courses require four years of work beyond the regular four-year high schools.

Two-year courses are also offered in both departments, open to high school graduates, leading to a diploma. Upon the completion of one of these courses, Industrial Arts or Household Arts, a diploma is issued, which, by statute, is made the basis for the issuance of a life certificate, after two years' successful teaching in Wisconsin.

This certificate legally qualifies the holder to teach the subjects in which training has been taken, in the public schools of the state. The certificate is issued by the Wisconsin State Board of Examiners and is accepted in most of the other states. The diploma is given upon the completion of the first two years' work of the degree courses.

RESIDENCE REQUIREMENTS

No diploma or degree is issued to any person who has not been a student in residence for at least one year. Four summer sessions are considered the equivalent of one year's residence.

QUALIFICATIONS FOR ADMISSION

Graduation from a four-year high school course, or equivalent preparation, is required for admission to each of the courses. A physician's certificate of good health and physical ability to carry on full work in the Institute, must be presented by each

student when first entering the school. Two testimonials of good character are required.

CREDITS

Students who have had normal or collegiate training are given credit for such of the required work in the Institute courses as they have satisfactorily mastered. Successful experience in teaching Industrial Arts or Household Arts before entering Stout Institute may reduce the amount of practice teaching required of the student. Candidates for advanced credit should present evidence of honorable dismissal from the school from which credit is sought, a certified copy of the standing in each subject for which credit is asked and a copy of the catalog of the school showing the courses taken. Such credentials should be submitted prior to enrollment.

ENROLLMENT

Persons who plan to enter the Institute should fill out an application for enrollment in advance. Blanks furnished by the Institute will be sent upon request. This enrollment blank, when filled out, should be forwarded to the school together with two certificates of good character, a health certificate, and a copy of the applicant's high school credits, the latter on the special blank of the Institute. While advance enrollment is not absolutely necessary, it is advisable, as misunderstanding and possible delay are thus avoided.

TUITION, REGULAR SESSION

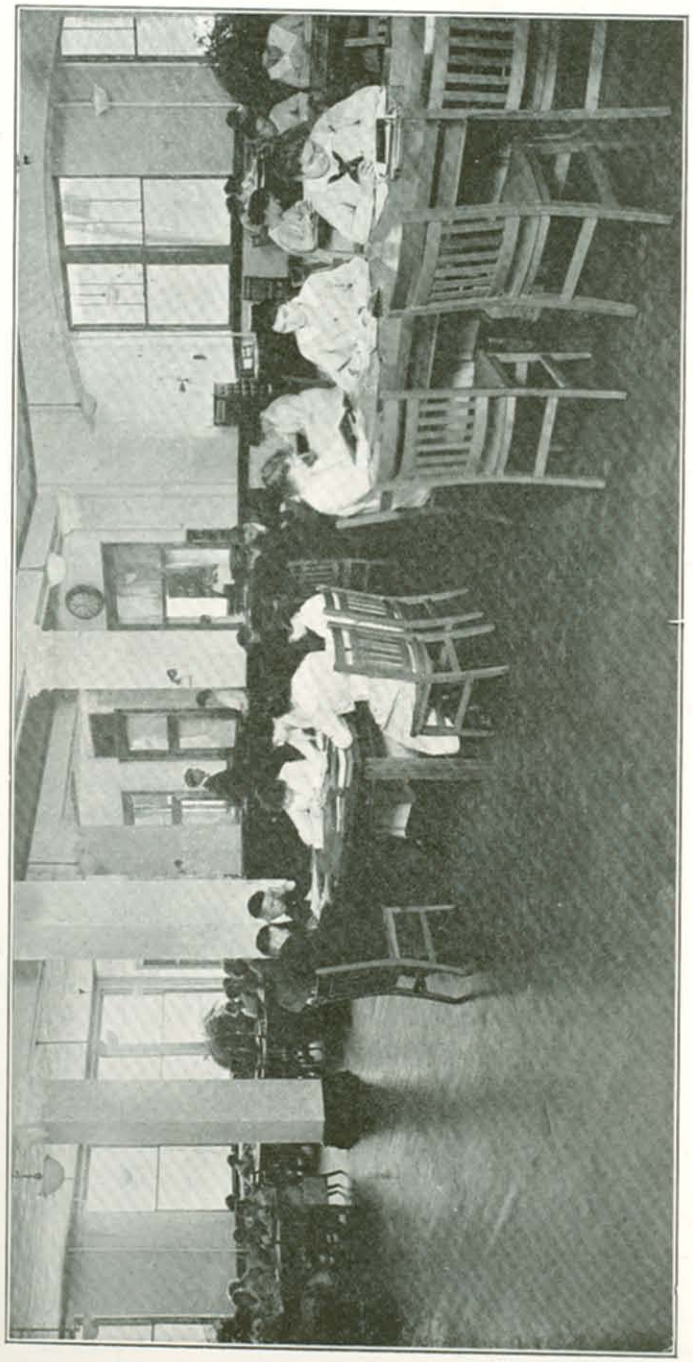
Tuition is free for residents of Wisconsin. For students not residents of Wisconsin the tuition is one hundred dollars per year, one-half payable at the beginning of each semester.

SHOP AND LABORATORY FEES

Fees are charged for shop and laboratory courses to cover the per capita cost of material used by students in these courses. The amount of the fee is given in connection with the outline of each course. In addition to the shop and laboratory fees, students are required to pay for any breakage of equipment or damage to buildings for which they are responsible.

LIBRARY FEES

A fee of seven dollars, payable at the opening of the school year, is required of each student. For this fee all necessary text-



PORTION OF THE STOUT LIBRARY

books are furnished from the loan textbook library for the school year, without any extra charge to students. The reference library is supplied with standard reference books needed to supplement textbooks in different subjects.

The reading room is supplied with daily and weekly newspapers, educational, literary, and technical periodicals adapted to the needs of the students, and available for their use.

SPECIAL EXAMINATION FEE

A fee of two dollars is charged for any special, final, individual examination given for the purpose of determining student's credit.

MATRICULATION FEE

A matriculation fee of two dollars will be charged all students.

FEES FOR TRANSCRIPTS

Each student upon graduation is given a certified transcript of the standings earned while in attendance at The Stout Institute. Additional copies are furnished at a minimum charge of one dollar per transcript.

DORMITORIES

Bertha Tainter Hall accommodates about thirty young women. The hall is furnished with all modern conveniences, the rooms are electric-lighted, and heated both by direct and indirect radiation, thus assuring ample heat and good ventilation.

Tainter Annex accommodates sixty-six young women and is situated on the same grounds with Bertha Tainter Hall. It is thoroughly suited to the purpose for which it is planned. The rooms are all arranged in suites of study and sleeping rooms, each suite for two students.

The charge for room for the school year for each student is seventy to eighty-five dollars, according to the size and location of the room. The charge for meals and a definite amount of laundry work for each student rooming in the halls is five dollars and fifty cents per week. A list of the different articles laundered weekly without additional charge is furnished each student.

The Institute authorities reserve the right to increase or decrease the price of table board a reasonable amount if changing prices make it necessary or advisable.

BERTHA TAINTER HALL DORMITORY AND THE STUDENT DINING ROOM

Rooms in the dormitories will be available Saturday, September 8, 1923. Meals will be served beginning Sunday, September 9, 1923.

LIVING EXPENSES OUTSIDE THE DORMITORIES

Rooms may be secured at prices ranging from one dollar and a half to two dollars per week per individual, and table board from five and one-half to six dollars per week.

THE STOUT INSTITUTE CAFETERIA

The Stout Institute Cafeteria, located in the east end of the basement of the Household Arts building, was opened in the fall of 1921. It is for the use of the students and faculty at the Institute, and their guests. At present several hundred may be accommodated for three daily meals. The equipment is complete and modern; prices are moderate; the service is adequate; the food and cookery are excellent. The cafeteria proves a convenience and an economy to many students. Students are securing meals for the week at from $4.50 to $6.00.

REFUNDS

Students who are compelled to withdraw from the Institute by reason of illness, not due to poor physical condition or ill health existing before entering, are entitled to a refund of tuition from the date when notice is received of such withdrawal, to the end of the semester.

THE STOUT CAFETERIA

Students boarding in the dormitories are also entitled to a refund of whatever amount has been advanced for board beyond the date when notice is received of withdrawal.

Refund for advance payment of room rent in the dormitories is allowed from the date when the room is again rented, and effort is made to secure an occupant at the earliest date possible.

As books and supplies for which fees are charged have to be bought in advance in quantities necessary to supply the entire enrollment, no refund of fees is made in any case.

UNIFORMS

Young women attending the Institute are required to wear uniforms during the daily sessions. Men are required to wear white overalls and jumpers in the woodworking shops, and brown overalls and working shirts in the metal working shops.

A gymnasium suit is required of each student taking physical training. It is required for all freshmen and sophomores.

Circulars of information regarding uniform and gymnasium suits for women will be sent to all enrolled students.

THE DEMAND FOR GRADUATES

The demand for graduates of Stout Institute as teachers and administrators of industrial arts and household arts and in continuation and vocational schools is steadily increasing year by

year. Graduates have taught or are teaching in every state in the Union, except three, and in Canada and Porto Rico. There is an increasing demand for dietitians, lunchroom managers, institutional and social workers.

The number of schools in which industrial arts and household arts are being taught is rapidly increasing and the demand for well-trained teachers of these subjects is greater than ever before.

The officers of the Institute are glad to recommend teachers to school officials who are seeking competent teachers or directors of vocational schools, of manual training, industrial arts, and household arts. In making recommendations every effort is made to name candidates who by training, temperament, personality, and experience are adapted to the demands of the position to be filled. The more complete and definite the information furnished as to the kind and amount of work required, and the salary to be paid, the better they are prepared to select the person most likely to give satisfactory service. They prefer to make no recommendation unless they feel confident that they can name a candidate who will succeed.

While the officers of the Institute never guarantee positions to students upon graduation, they do everything in their power to assist graduates to positions they are qualified to fill. For the past few years the Institute has been called upon for more than three times the number of teachers it could supply.

SCHOOL SESSIONS, ENROLLING

The school year opens September 10, 1923, the first semester closing January 25, 1924. The second semester opens January 28, 1924, and closes May 30, 1924. Students should arrange to enter at the beginning of the school year if possible. When this cannot be done, students may enter at the beginning of the second semester or at the beginning of the summer session.

ADVANTAGE OF CONTINUOUS ATTENDANCE

By enrolling at the beginning of any summer session and remaining in continuous attendance, a student saves one-half of a year on the diploma course and a full year on the degree course.

Address all correspondence regarding courses of study or general work of the Institute, to

PRESIDENT BURTON E. NELSON,
The Stout Institute, Menomonie, Wisconsin.

GENERAL INFORMATION SUMMER SESSION 1923

SUMMER TERM, ENROLLING

The Eighteenth Annual Summer Session of The Stout Institute opens June 25, 1923, and closes August 24, 1923. During the session, which is a nine week term, classes are held five days of the week, the week ends affording opportunity to make use of the recreational facilities of the Lake Menomin, the Red Cedar river and vicinity. Several Institute events, such as the Summer Session Picnic, have, through popularity, become traditional. The Stout Institute now runs 45 weeks per year, two 18-week semesters, and a 9-week summer session.

In subjects requiring daily recitation during the eighteen week semesters, half credit is secured in the summer, except where two recitations per day make it possible to earn full credit in the summer. In subjects requiring two or three recitations per week during eighteen week semesters, full credit is earned during the Summer Session by lengthening class periods or increasing the number of periods per week.

No student is enrolled in the Summer Session for less than two courses. Students should enroll early, as many of the classes are limited in size and it is sometimes not possible to duplicate these classes. Preference is given to those who make early application. After the enrollment in a class has reached the number that can be taught with profit to the students no more are admitted. Classes will not usually be opened for less than six students.

Former students and graduates of the school may take advanced work for credits toward a degree.

Workers in the crafts and those wishing to gain practical experience in shop processes may find a variety of opportunities.

Housekeepers and others desiring instruction in household arts and science and in the management of public institutions may find courses suited to their needs.

Directors and teachers of vocational schools and skilled trade workers wishing to take professional training for teaching in vocational schools will find work adapted to their needs.

COURSES ADAPTED TO A VARIETY OF NEEDS

Supervisors and teachers of the industrial arts or household arts may strengthen their work in technique or on the professional side. Directors and teachers of vocational schools will find a wide range of work adapted to their needs.

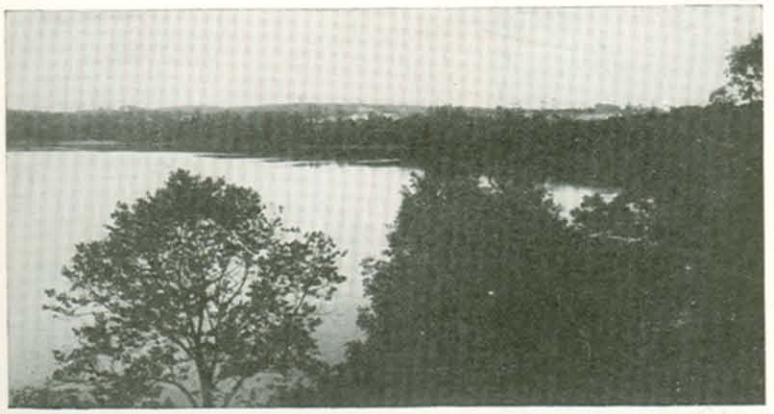
Superintendents and principals of public schools may gain a first-hand acquaintance with the character and results of the Industrial and Household Arts work, as administered in the Menomonie public schools.

Teachers in other subjects in graded schools and high schools may fit themselves to teach some form of shopwork or home making in their own schools.

Students and teachers planning to take any of the regular courses in The Stout Institute, or now taking such work, may shorten the time for completion of course by attending the summer session.

TRAINING OF VOCATIONAL TEACHERS

The Stout Institute has been designated by the State Board of Vocational Education as the institution in Wisconsin to receive Federal aid under the Smith-Hughes Law for the preparation of teachers of the Industrial Arts for Vocational Schools.



LOOKING ACROSS LAKE MENOMIN

THE TRAIL UP THE RIVER

The courses offered for this work have been approved by the Federal Board of Vocational Education.

Special attention will be given to the needs of directors and teachers of vocational schools and skilled trade workers wishing to take professional training for teaching in vocational schools.

CHOICE OF COURSES

Students may elect courses, as far as the schedule of classes permits, and the student is prepared to do the work required. All students desiring to take more than ten credits will secure permission from the director. No change will be made from one course to another without the consent of the director of the department. For schedule of classes see pages 33 and 34.

VACATION FEATURES

Menomonie is a very comfortable and attractive location in the summer, being surrounded by several bodies of water which provide ample boating and bathing facilities. Red Cedar River, which flows through the city is much used during the summer by parties in canoes, row boats, and launches. All of these kinds of boats are for rent at reasonable rates. Students during the Summer Session have made very enjoyable trips during their stay in the city. Week-end outings are frequently made up the river to Cedar Falls. There is good fishing within ten minutes walk of the Institute buildings.

AN ARM OF LAKE MENOMIN

SUMMARY OF COURSES

On pages 31 to 32 is given a summary of the courses offered during the Summer Session as well as of the courses required for graduation. These courses are outlined and those given in the Summer Session are indicated. A schedule of classes for the Summer Session will be found on pages 33 and 34. The outline of the work in any course may be readily found by consulting the index.

EXPENSES
SUMMER SESSION

Tuition is free to all residents of Wisconsin; to others the tuition is $25, one-fourth of the tuition of $100 for the regular session. Dormitory rates for the summer for room, board and laundry, $75. The amount of laundry work under the above arrangement is the amount each student requires each week.

Rooms may be occupied June 23. Meals are served throughout the session, beginning with breakfast June 24 and ending with breakfast August 25.

FEES

A library fee of $2.00 will be required of all summer session students. For this fee textbooks will be provided for the use of students during

the summer session, and they will also have the use of reference books and periodicals in the reading room.

SHOP AND LABORATORY FEES

For any course receiving the same credit as is given for the work in the course during the regular session, the fees will be the same as those listed under these courses for the general session.

SPECIAL EXAMINATION FEE

A fee of $2.00 is charged for each special individual examination given for the purpose of determining a student's credit.

This does not apply to the regular class examinations.

All fees are payable at the opening of the summer session.

REFUNDS

No deduction will be made for tuition or fees for students entering late or leaving before the close of the session. No refund will be made in any case for fees. Students having to leave before the close of the summer session because of illness will be entitled to a refund for the amount of tuition and board proportionate to the time to elapse from the withdrawal to the end of the session. A similar refund will be made of the money advanced for board. No refund will be made on account of room rent paid in advance until the room is again occupied.

ACCOMMODATIONS OUTSIDE THE DORMITORIES

Rooms can be secured at from $1.50 to $2.00 per week per person. Board from $5.00 to $6.00 per week. The Stout Institute cafeteria is available for all students outside the dormitories.

For further information regarding the Summer Session, address:

DIRECTOR OF SUMMER SESSION,
The Stout Institute, Menomonie, Wisconsin.

LIST OF COURSES OFFERED IN SUMMER SESSION 1923

VOCATIONAL EDUCATION—7 COURSES

For directors and teachers of State and Federal aided Vocational and Industrial Work.

Administrative Problems
Organization of Home Economics
Organization of Industrial Arts
Principles of Education
Principles of Teaching
Teaching Vocational and Industrial Classes
Vocational Education

INDUSTRIAL ARTS—40 COURSES

For teachers and supervisors of Industrial Arts and Manual Training in Elementary and Secondary schools, junior and senior high schools and for Vocational-School teachers.

Auto Mechanics I, II, III
Bricklaying and Concrete I, II
Cabinetmaking I, II
Carpentry I
Drawing
  Architectural I, II
  Elements of Mechanical Drawing
  Machine Drawing I, II, III
Electrical I, II
Elements of Woodwork I, II
Forging I, II, III
Foundry I
Furniture Upholstery
Home Mechanics I
Machine Shop I, II, III
Millwork I
Patternmaking I, II
Printing I, II, III, IV
Radio I
Sheet Metal I, II, III
Woodfinishing I
Woodturning I

HOUSEHOLD ARTS—33 COURSES

For teachers and supervisors of Household Arts for dietitians and for institutional directors.

Cafeteria Management
Chemistry
  Food Analysis
  Food
  General
  Physiological
  Qualitative Analysis
  Textile
Clothing I, II, III, IV, V
Color and Design I, II
Community Hygiene
Cookery I, II, III, IV, V
Costume Design
Food Study
House Management
Household Physics
Hygiene and Home Nursing
Institutional Management
Interior Decoration
Laundering
Microbiology
Millinery
Nutrition I, II
Textiles

DEGREE AND DIPLOMA ACADEMIC WORK AND SCIENCE—23 COURSES

For Stout two-year course graduates and others studying for the Bachelor of Science degree in Industrial Arts or Household Arts and for those studying for the diploma.

Citizenship
Economics
English Composition
English Directed Reading I, II, III, IV
English Literature
History
American
Industrial
Modern
Home and Social Economics I, II
Hygiene and Safety
Materials of Construction
Mathematics I, II
Physics (Applied)
Psychology I
Psychology II
Psychology, Child
Public Speaking
Sociology

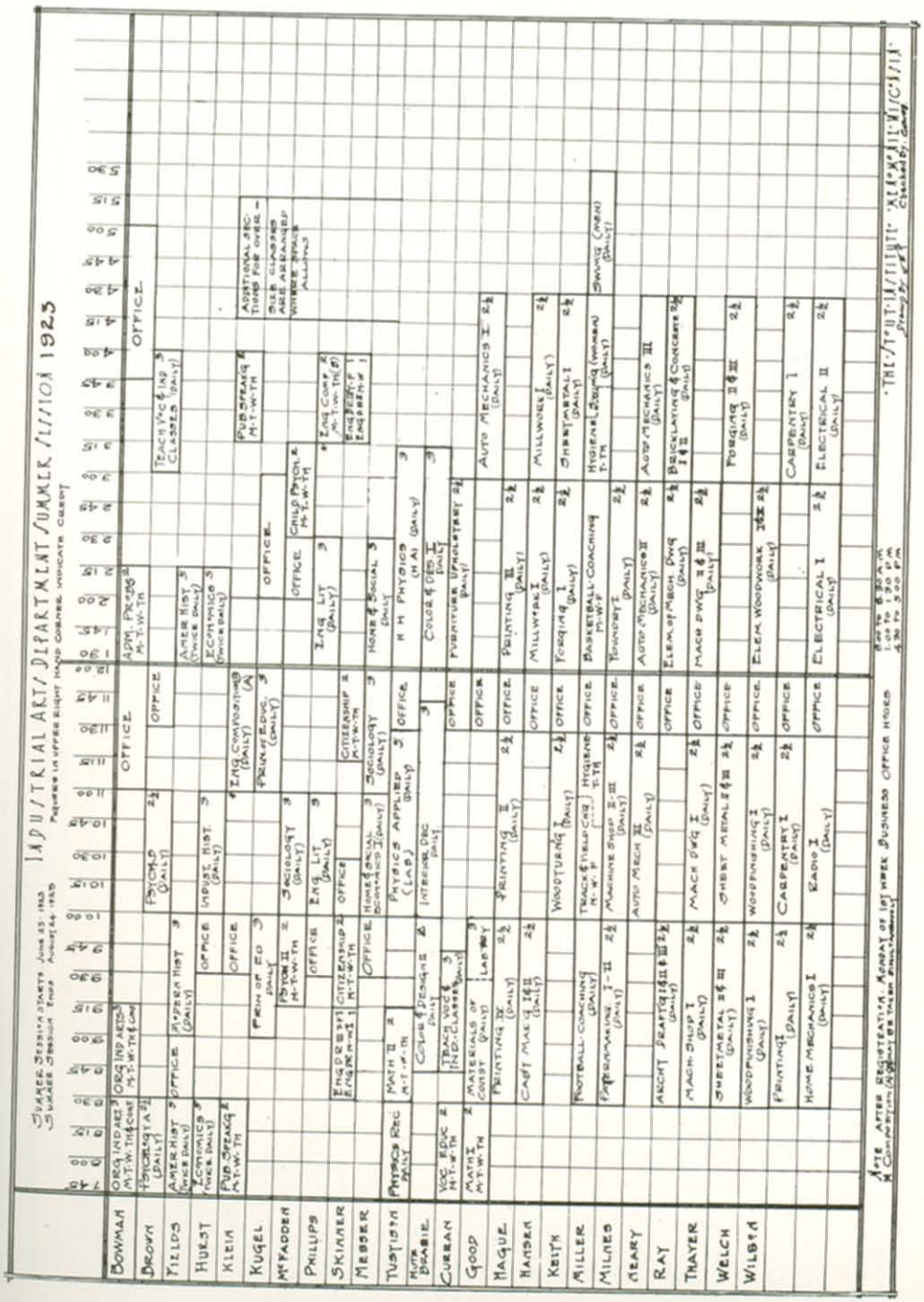
PHYSICAL TRAINING—5 COURSES

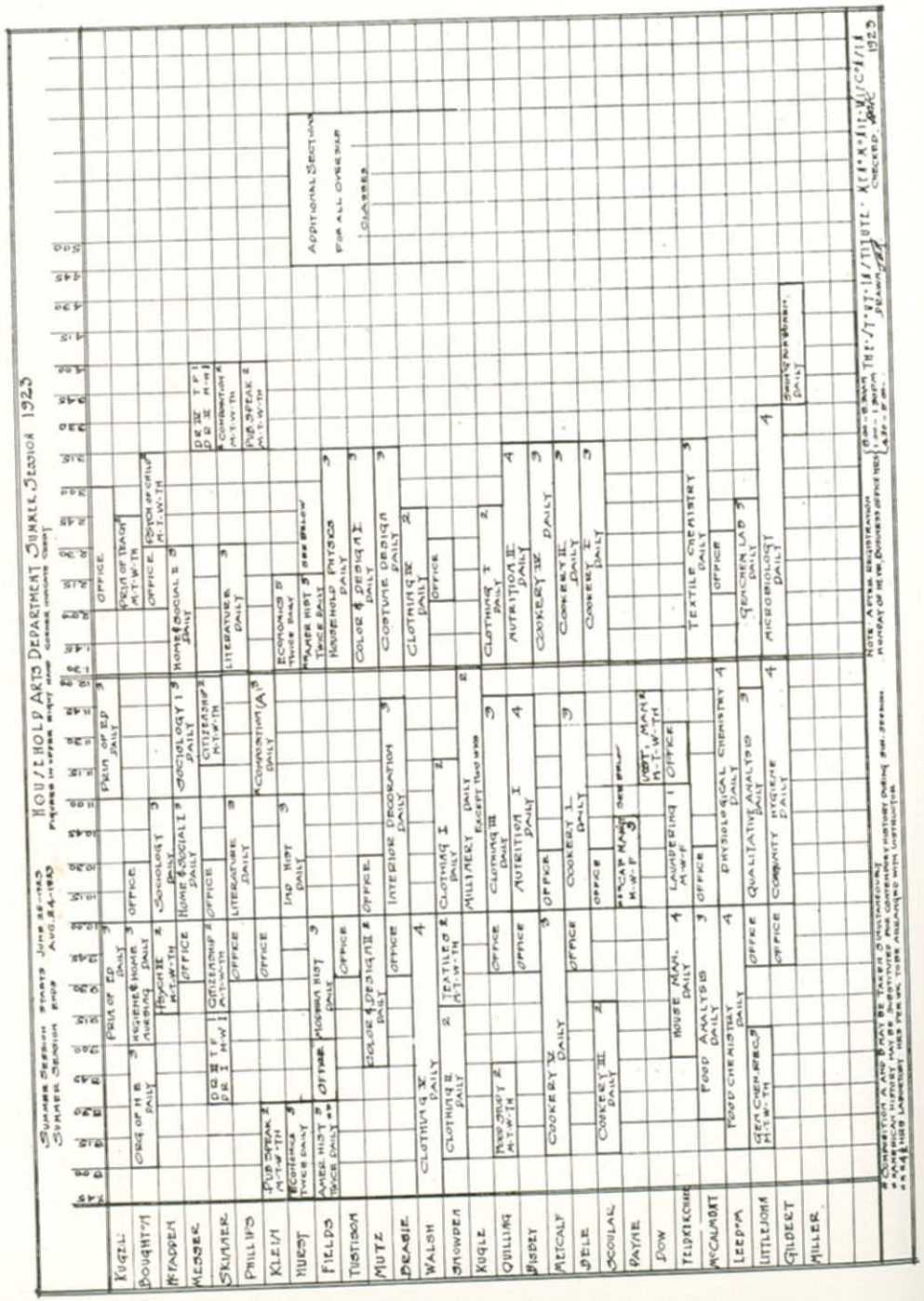
For Athletic Coaches and others interested in athletic games and swimming.

Basketball Coaching Football Coaching Swimming for Men
Swimming for Women Track and Field Coaching

TRADE BUILDING AND INDUSTRIAL ARTS BUILDING

Trade Building containing shops for carpentry, millwork, cabinetmaking, auto mechanics, bricklaying, sheet metal, elementary woodwork, woodfinishing, architectural and machine drawing. The Industrial Arts Building in background, which contains the forge shop, machine shop, foundry, woodturning, pattern-making, printing, electrical work, home mechanics, physics laboratories, recitation rooms, exhibit rooms and department offices.





COURSES OF STUDY 1923-1924

DEGREE AND DIPLOMA

The degree of Bachelor of Science in Industrial Arts is conferred upon students completing the Industrial Arts course, and the degree of Bachelor of Science in Household Arts upon students completing the Household Arts course.

The work required in the first and second years constitutes the two-year course. Upon its completion a diploma is given, which entitles the holder to a state license to teach either the industrial arts or the household arts in the public schools of the state for two years. Upon the presentation of evidence of two years' successful teaching, a life state certificate is issued by the State Board of Examiners.

ADVANCE CREDIT

Advance credit will be given for equivalent work done in colleges of recognized standing. The question of equivalency will be determined by the faculty committee on advance credit.

Students seeking credit for work done in other institutions must present evidence of honorable dismissal from such institutions, and a certified record from the institution showing the number of semester hours work in each subject, together with a copy of the catalog of the institution showing the courses taken.

INDUSTRIAL ARTS DEPARTMENT

Two and Four Year Courses

The hours indicated are semester hours required.

One hour of recitation or two hours of shop or laboratory work, with such outside preparation as may be necessary, once a week for eighteen weeks, constitutes a semester hour.

First Year	Hrs.
Shop Work and Drawing	20
Psychology I	5
English Composition	5
English, Directed Reading	1
American History	5
Physical Education	2
	38

Second Year	Hrs.
Shop Work and Drawing	20
Organization of Industrial Arts	2
Teaching Industrial Arts	3
Observation and Practice Teach.	4
English, Directed Reading	1
Public Speaking	2
Hygiene and Safety	1
Citizenship	1
Physical Education	1
	38

The twenty hours of shop-work in the first year will be in three or more of the following subjects, to be determined by the director:

Elements of Woodwork	Mechanical Drawing	Machine Shop
Carpentry	Electrical Work	Printing
Forging	Wood Turning	Woodfinishing

The twenty hours shop-work in the second year will be in three or more of the following subjects, to be determined by the director:

Millwork	Auto Mechanics	Foundry Work
Cabinetmaking	Metal Finishing	Machine Drawing
Masonry	Patternmaking	Sheet Metal Work
Home Mechanics	Architectural Drawing	Radio

And advanced courses in shops listed under first year.

Third Year

	Hrs.
Shop Work, Drawing and Design	10
Psychology II	2
Vocational Education	2
English Literature	3
Directed Reading	1
Modern History	3
Modern Industries	2
Mathematics	4
Sociology	3
Physics	5
	35

Fourth Year

	Hrs.
Shop Work and Drawing	10
Administrative Problems	2
Materials of Construction	3
Industrial Chemistry	5
Economics	5
Directed Reading	2
Industrial History	3
Principles of Education	3
Thesis	2
	35

The ten hours required shop-work and drawing in the third year, and in the fourth year, will be specialization in the shop-work taken in the first and second years or new work.

In the fourth year five hours of additional shop-work may be substituted for the same number of hours of other work, when approved by the director.

HOUSEHOLD ARTS DEPARTMENT

Two and Four Year Courses

First Year

	Hrs.
General Chemistry	5
Food Chemistry	4
Food Study	2
Psychology I	5
English Composition	5
Interior Decoration	3
Clothing and Textiles	5
Cookery I, II	5
Hygiene	2
Home Nursing	1
Physical Education	1
	38

Second Year

	Hrs.
Microbiology	4
Nutrition I	4
Home Management	3
Home and Social Economics I	3
Color and Design I	3
Clothing III, IV	4
Cookery III, IV	4
Organization of Home Economics Courses	3
Practice Teaching	4
Directed Reading	2
Laundering	1
Methods of Household Arts	2
Physical Education	1
	38

Third Year

Textile Major	Hrs.	Required	Hrs.	Food Major	Hrs.
Millinery	2	English Literature	3	Cookery V Experimental	3
Chemistry of Textiles	3	Directed Reading	1	Food Analysis	3
Color and Design II	2	Psychology II	2		6
	7	Modern History	3		
		Household Physics	3		
		Public Speaking or Citizenship	2		
		Home and Social Economics II	4		
		Qualitative Analysis	3		
			21		

Fourth Year

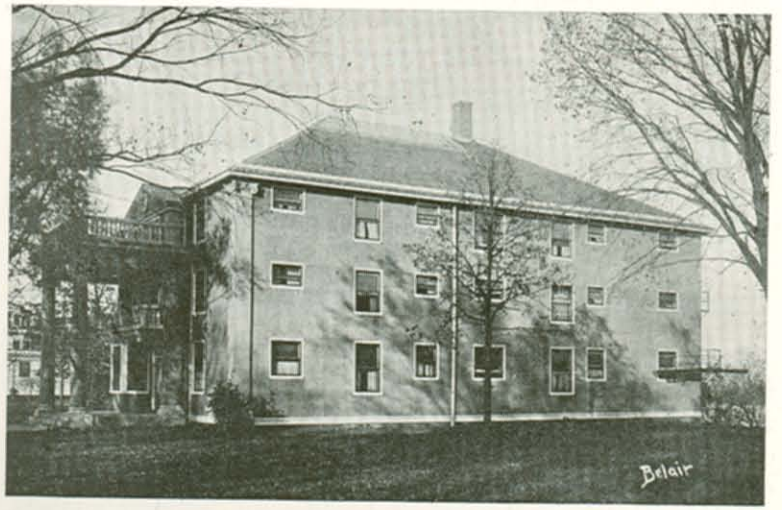
Textile Major	Hrs.	Required	Hrs.	Food Major	Hrs.
Costume Design	3	Directed Reading	2	Physiological Chemistry	4
Clothing V	4	Principles of Education	3	Nutrition II	4
	7	Community Hygiene	4		8
		Contemporary History	5		
		Principles of Teaching	2		
		Thesis	2		
			18		

In addition to the required subjects, students, in the third and fourth years, are expected to elect from the following list sufficient work to complete 32 credits for each year.

Students taking the food major may elect from the textile major.

Students taking the textile major may elect from the food major.

	Hrs.		Hrs.
Home and Socieal Economics III	3	Institutional Organization and Administration	2
Psychology of Childhood and Youth	2	Cafeteria Management and Cookery	3
Sociology	3	Mechanical Drawing	2½
Economics	5	Architectural Drawing	2½
Industrial History	3	Vocational Education	2
Administration Problems	2		



TAINTER ANNEX, DORMITORY FOR GIRLS

The rear rooms have an attractive view overlooking Lake Menomin. A short walk acress a rolling lawn connects the Annex with Tainter Hall, which may be seen to the left.

OUTLINE OF COURSES

NOTE:

1st Sem.—Course offered the first semester.
2nd Sem.—Course offered the second semester.
S. S.—Course offered in summer session.

COURSES IN EDUCATION

PSYCHOLOGY I

Fundamental principles of psychology and their application to the problems of the classroom constitute the work of this course. The psychology of attention, habit and will are the phases which receive special attention. Principles, both of psychology and pedagogy, are studied and discussed in terms of definite application to concrete teaching problems.

1st Sem.; 2nd Sem.; S. S. Credits: 5

PSYCHOLOGY II

The student will be asked to keep in mind the fundamental principles taken up in Psychology I. These will be studied in relation to their social and educational significance. Specific modes of conduct will be studied as results of specific mental functioning and as indices of quite definite mental or social development. The results of such studies will form the basis for working out problems of attack in educational and social development. Prerequisite: Psychology I or its equivalent.

1st Sem.; S.S. Credits: 2

PSYCHOLOGY OF CHILDHOOD AND YOUTH

In this course the mental life of a young child, as distinguished from the mental life of a youth or of an adult, is taken up. Among the subjects to be discussed are: sensation as a basis for consciousness; characteristics of children's imagination; proper mental food for children, and how the character of this food must change with each stage of development; children's ethics. Prerequisite: Psychology I or its equivalent.

2nd Sem.; S. S. Credits: 2

ORGANIZATION OF INDUSTRIAL ARTS COURSES

Problems of organization of courses and shops include the formulation of purposes, arrangement of courses and plans for school shops. An analysis of subject matter arranged by grades begins with elementary work and covers junior and senior high school shop work, mechanical and free-hand drawing, and special attention to vocational courses. Study is made of equipment and maintenance of industrial arts and vocational departments, considering: kinds, quantity, and cost of tools, benches, cabinetwork, and miscellaneous supplies. The selection and installation of equipment for various lines of school work are also made a feature of this course. Special attention is given to matters of arrangement of shops, the planning of equipments, lighting, storage of supplies, and consideration of economy in purchasing. A study is made of details of business administration and general management of the work of an industrial arts department in a public school system. 1st Sem.; 2nd Sem.; S. S. Credits: 2

METHODS, INDUSTRIAL ARTS

Each industrial arts student upon beginning his sophomore year selects his major and minor shop or drawing work. These two lines of work form the core of his second year's shop work. In conjunction with the work in Organization of Industrial Arts, the student carries through a definite series of assignments of work with the instructor in each of the two lines of work, his major and his minor.

These assignments of work are in a sequence and cause the student to study and keep a record of sound, specific methods of analysis, selection and teaching peculiarly fitted for his major and minor lines of work.

1st Sem.; 2nd Sem.; S. S. Credits: 1

TEACHING INDUSTRIAL AND VOCATIONAL SUBJECTS

The purpose of this course is to bring about a definite realization of the principles of teaching and their application to industrial arts and vocational subjects. The effective organization of subject matter for daily class or shop teaching and the methods of presentation are the phases on which stress is placed. Attention is also called to shop and class management as a factor in efficient instruction.

The scope of the course is as follows: first, a clear, concise statement of the problem of teaching in which the function of the school and the teacher is shown; second, the factors that enter into the teaching process and which must be taken into account by the teacher; third, the fundamental laws of teaching and their application to the industrial arts and vocational school problems; fourth, types of lessons and suggestions offered by each to the industrial arts teacher; fifth, classroom and shop methods, including the organization of subject matter for instructional purposes and the assignment and distribution of students and work during the class period; sixth, standards for testing results of classroom or shop procedure covering systems of grading and the determination of the worth of subject matter and method. 1st Sem.; 2nd Sem.; S. S. Credits: 3

PRINCIPLES OF TEACHING

The purpose of this course is to give students a better understanding of the fundamental principles involved in method, and to make the application of these, as well as of the more general principles of educational aims and values, to the field of Home Economics teaching. Types of lessons are studied and analyzed, and the classroom discussions are prolific in concrete illustrations which meet the needs of the teacher of Home Economics subjects. Observation of classroom work is followed by reports, and opportunity for experimental teaching. Prerequisites: Organization and Management of Household Arts Courses, Psychology II, Principles of Education.

2nd Sem.; S. S. Credits: 2

OBSERVATION AND PRACTICE TEACHING

As a requirement for graduation from the Industrial Arts Department, every student must have at least eighteen weeks of practice teaching. Proof of successful teaching experience may, at the discretion of the head of the department, reduce this requirement. The practice teaching schedule is arranged in periods of nine weeks' duration, thus permitting students to gain experience in two or more different lines of work if it is so desired. All practice work is in connection with the public school system and the local vocatonal school and covers a wide range of work. The teaching is done under the direct supervision of the special teacher of the subject in which the instruction is given. Before taking charge of any class the student

teacher must prepare and submit for criticism a lesson plan indicating the proper order of procedure for each day's work.

Before beginning practice teaching, and as a preparation for it, the student systematically observes the work of experienced teachers. Every teacher in the Institute bears in mind that it is his work to train his students to teach, as well as for him to do good teaching. In doing this, he calls attention to his mode of presentation of subject matter; to the pedagogical principles he applies in his class work, and to the manner in which the application is made; and to what modifications in methods of applying these principles must be made to adapt the instruction to the capabilities of less mature students. The student, as he comes in contact with different teachers, and in his class work in different subjects, is thus consciously observing the work of skilled teachers and studying the art of teaching, through the concrete application of important pedagogical principles in the teaching of a wide range of subjects.

As a requirement for graduation from the Household Arts Department, every student must have from twelve to eighteen weeks of practice teaching, including both food and clothing work. The teaching is preceded by a series of observation lessons which form the basis for discussion in the observation class.

The teaching is done in the Menomonie public, parochial and vocational schools and ranges from fifth grade sewing to fourth year high school dietetics and household management.

The work in this department is planned, directed, and supervised by two supervisors of practice teaching. Detailed lesson plans are required for each lesson taught and these must be approved by the supervisor before the lesson is given. Personal consultation and conferences between the student teacher and the supervisors after each lesson, strengthen the work and give direction and guidance when it is most needed. This work is open to students classified as Sophomores, Juniors or Seniors.

1st Sem.; 2nd Sem. Credits: 4

VOCATIONAL EDUCATION

The emphasis in this course is placed upon the growth and development of industrial education, studies of specific types of schools, their purpose and organization, State and Federal legislation, and the vocational guidance movement. Lectures, assigned readings, individual reports and assignments are utilized

to these ends. The outline of the work covered is as follows: (1) History and development of the industrial education movement in the United States, including the influence of European systems, causes for its rapid growth in the United States, defining of terms growing out of the development, and analyses of the various purposes of the different movements; (2) Study of specific types of schools, their purposes and organization, including the trade, general industrial, part-time, apprentice, corporation, junior and senior high schools, with their resultant demands on the industrial teacher and his training; (3) Means and methods for continuous, specific carrying on of trade and subject analysis, and use of the results; (4) Analysis of industrial organization to orient vocational school work, and the vocational guidance implications; (5) Recent progress in vocational education as indicated in an analytical study of typical state plans; state and national legislation, and surveys. 1st Sem. Credits: 2

PRINCIPLES OF EDUCATION

This course is intended to serve as an introduction to, and an evaluation of contemporary educational theory and practice. The work consists of reference reading, reports and discussions on the various aims of education; analysis of different subjects with reference to educational values; place in the curriculum; the organized and unorganized educational agencies, their contact with the individual and the manner in which he is most helpfully affected by them; present day criticisms of education; contemporary educational reforms and practices.

1st Sem.; S. S. Credits: 3

ADMINISTRATIVE PROBLEMS

This course includes a survey of the problems of educational administration of interest and value to executives and teachers in vocational education and in the practical arts. The following topics represent the type of work covered: Systems of organization in public schools and in higher institutions, adaptation of modern efficiency studies to such schools, the school budget and financial administration, school officials and their supervisory duties, training teachers in service, planning and management of the school plant, publicity and promotion work, consideration of student needs and interests. 2nd Sem.; S. S. Credits: 2

ORGANIZATION OF COURSES IN HOME ECONOMICS

The topics considered in this, a professional course, are: the aims and purposes of Home Economics work in the schools; place in the curriculum; relation to various schemes of school organization, such as elementary, junior and senior high, rural, and part-time schools; courses of study in different types of schools, based on the aims of the school and the needs of the girl; equipment—its selection, purchase, cost and care; cost of maintenance of department; business management. Methods of teaching are studied with reference to the preparation for the lesson, preparation of materials and equipment, presentation of lessons, class and laboratory management. The special teacher is considered from the point of view of her training, personality, relations with other teachers and with other people in the community, attitude toward principals and superintendent. The work consists of lectures and class discussions. This course is not open to students classified as freshmen. 1st Sem.; 2nd Sem.; S. S. Credits: 3

COURSES IN ECONOMICS AND SOCIOLOGY

ECONOMICS

The aim of this course is to acquaint the student with the basic principles of economics in order that he may have a more intelligent understanding of the actual application of economics to present day economic and industrial problems. Emphasis is given to this phase of the work. The more important topics taken up are: the place of economics in the social sciences; the goal of economic endeavor; the basis of economic study; the nature and scope of economics; evolution of economic society; consumption; production; value and price; monopoly; the trust problem; money and banking; distribution; industrial organization; wages, labor problems; industrial legislation; attempts to adjust industrial inequalities; modern economic progress.

2nd Sem.; S. S. Credits: 5

MODERN INDUSTRIES

The topics considered in this course are: (1) Analysis of typical industrial organizations, present and past; (2) Classification

of present trends in industrial organization to indicate resulting pressure on school operation through increased speed and size of work undertaken, standardization, sub-division of work units, concentration of manufacturing units, application of science, organization of labor and of wealth; (3) Analysis and classification of typical production from raw material to finished products to indicate occupational interdependence in fields of production of significance to the vocational director, both in operation and in extension work; (4) Relationships between modern industrial organization and the causes, development, and present system of organization and operation of vocational guidance.

2nd Sem. Credits: 2

SOCIOLOGY

The aim of this course is to secure such knowledge of sociological principles as will enable the student to study intelligently the present conditions in society falling under these principles. This will involve the study of conditions under which society has developed and how these conditions have been modified in the past and may be still further modified in the future for the betterment of the individual in society. 2nd Sem.; S. S. Credits: 3

CITIZENSHIP

The aim of this course is to develop a knowledge of what is essential for high quality American citizenship. It will consider not only the privileges and opportunities resulting from citizenship but will take into account and emphasize the reciprocal duties and obligations involved in citizenship. As ours is a government by the people, the individual's responsibility in this government will be studied with care. As ours is a government of the people and for the people, the rights of the people under that government will also be considered. Local government is stressed, but it is not forgotten that our national government is still active and operating. 1st Sem.; 2nd Sem.; S. S. Credits: 2

HOME AND SOCIAL ECONOMICS

The following courses aim to interpret to students their opportunities and responsibilities as modern women. They supply a certain historic background, together with necessary current data, and deal with personal and social problems.

I—The Family

The object of this course is the development, through reading and discussion, of practical ideals of living as especially related to the family group. With this end in view the family is studied in its primitive forms and traced through history up to modern times. The modern family is studied sympathetically, and at the same time subjected to a critical analysis, including the consideration of such subjects as divorce, desertion, and the social evil. Current social movements making for the betterment of these conditions are considered, such as those resulting in appropriate legislation, the establishment of special courts, education for home-making, and the development and popularization of adequate ideals. 1st Sem.; 2nd Sem.; S. S. Credits: 3

II—The Child

It is the aim of this course to make an interpretative study of the child rather from the standpoint of the mother and society than of the teacher. A social survey of the status of the child is made, together with a study of current movements for child-betterment, including such topics as the Children's Bureau, juvenile courts and playgrounds, child labor legislation, and correlated topics. The function of the mother, as an educator and companion, is especially considered. A study of books for children concludes the course. Prerequisite: Psychology I.

1st Sem.; 2nd Sem.; S. S. Credits: 3

III—Woman in Industry

As contrasted with the course on the Family, dealing essentially with woman in the home, this course takes for its subject woman as a worker in the outside world. It concerns itself throughout, however, with the correlation of her problems; that is, it bears in mind the personal and human factor in its study of the occupational field. The material is largely drawn from surveys of the trades, which are studied in detail, after a brief preliminary study of the historic background. Industrial organization as expressed in trust, monopoly, and trade union is also briefly studied. An analysis of wrong conditions is followed by a study of such agencies of betterment as the Consumers' League, social and philanthropic work, and vocational education. The effect of the world war on industry, and especially woman's work, concludes the course. 2nd Sem.; upon demand. Credits: 3

IV—The Woman Citizen

It is the aim of this course to equip the woman citizen with a working knowledge of federal, state and local governments and to interpret her relations to society as a voter. The course will open with a short review of the woman suffrage movement in the United States, including a brief survey of woman's current status, political and legal. Government will be studied not only as a system, but in active operation, conditioned continually by party politics and by its personnel. Emphasis will be thrown particularly on problems and ideals and the significance of women as a new social force. Excellent modern books along these lines have been secured for students.

1st Sem.; 2nd Sem.; upon demand. Credits: 4

The well equipped physical laboratory is used by the men for applied physics and the women for household physics. Special equipment is available and is being constantly added for the study of practical phases of physics in the shop and the home.

COURSES IN SCIENCE AND MATHEMATICS

MATHEMATICS

In Mathematics I, such portions of geometry, algebra, and logarithms as are useful to the teacher of Industrial Arts are studied and then application in industrial operations taught. Instruction is also given in the use of the slide rule.

It is the object of Mathematics II not only to master the principles of plane trigonometry, but to use these laws in the solution of shop problems. 1st Sem.; S. S. Credits: 4

APPLIED PHYSICS

The aim of this course in applied physics is to make practical application of the principles of physics to industrial lines of work. These principles are demonstrated and worked out through laboratory work and the use of commercial apparatus and machinery in actual operation.

Fee: $4.00 Sem. 2nd Sem.; S. S. Credits: 5

HOUSEHOLD PHYSICS

The purpose of this course is to teach the principles of physics applicable in the use and care of the equipment of homes, schools,

and institutions, with particular reference to the sanitary aspects. The course will deal with water supply, plumbing, sewers, heating, ventilation, refrigeration, gas supply, stoves, lamps, electric lighting, cooking and heating, telephone, elevators and dumbwaiters, machinery for dishwashing, laundry and cleaning, fire extinguishers and general repairs.

Fee: $3.00. 1st Sem.; S. S. Credits: 3

INDUSTRIAL CHEMISTRY

This course treats the subject from the practical standpoint and through lectures, demonstrations, and laboratory work endeavors to present scientific information pertaining to the common industrial materials. Following a brief study of the fundamentals of chemistry, a study is made of the composition and characteristics of the various irons and steels, the corrosion and oxidation of metals; the composition and setting reactions of mortar and cement, changes in cement and concrete due to heat and other causes; chemistry of paints, oils, stains, and varnishes; tests of lubricating oils and compounds, treatment and preservation of rubber and leather belting: composition of various kinds of glue; the chemistry of the storage battery, and the composition, decay and preservation of wood.

Fee: $4.00 Sem. 1st Sem.; S. S. Credits: 5

MATERIALS OF CONSTRUCTION

The work in this course is organized around the materials of the machine and building trades. Standard and special tests are carried out with the following materials: various grades of iron and steel; building materials such as cement, concrete, stone, and brick; woods of various kinds; types of construction involving wood and metal; holding power of glue, screws, nails, and other fasteners; foundry materials such as molding and core sands and binders; rubber, leather, and cotton belting.

2nd Sem.; S. S. Credits: 3

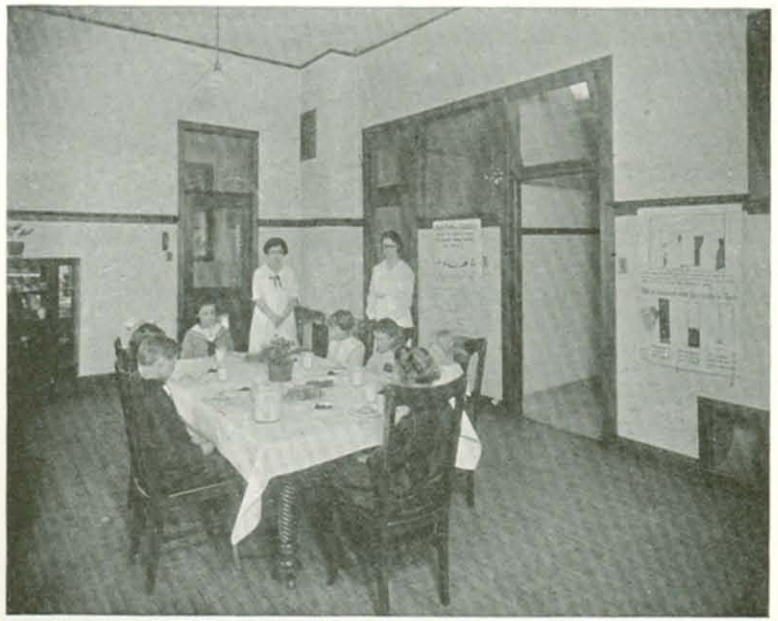
GENERAL CHEMISTRY

In this course it is proposed to teach the chemical viewpoint of matter, to give definite meaning to necessary technical terms, and to teach accuracy in scientific work. The course includes the fundamental theories and laws concerned in chemical reactions; the study of the non-metallic elements; the properties of a few metals, especially those whose compounds are in common use, and those which are used as utensils for the household; and the application of chemical principles to the field of household arts. Laboratory experiments supplement the recitation work. McPherson and Henderson's "Course in General Chemistry" is used as a text. The laboratory manual has been compiled to emphasize the above features. A course in high school chemistry is very desirable.

Fee: $5.00. 1st Sem.; 2nd Sem.; S. S. Credits: 5

FOOD CHEMISTRY

The purpose of this course is to give the fundamental chemical knowledge necessary for an understanding of household processes involved in cleaning and in cookery and the chemical composition



Malnourished children learning to select food to meet their needs. Household Arts seniors in charge of the children.

of foods. The course consists of recitation and laboratory work. A brief outline of the course includes: hydrocarbons, as related to fuels and dry cleaning; alcohols, especially the one involved in bread making; acids, as related to the study of fats, vinegar, fruits, and vegetables; esters, as used for flavorings; fats, carbohydrates, and proteins, as to occurrence, composition, and reactions; disinfectants; preservatives; patent medicines. Emphasis is constantly placed on the practical and professional side of study. The points brought out in class discussions have applications to high school cookery, food study, and chemistry, as well as to household management, physiology, and home nursing. Prerequisites are courses in General Chemistry, and Cookery I.

Fee: $5.00. 1st Sem.; 2nd Sem.; S. S. Credits: 4

QUALITATIVE CHEMICAL ANALYSIS

The aim of this course is to give the student the power of determining, in a qualitative way, the constituents in any ordinary material that might come into the home, school, or laboratory. The course is chiefly laboratory work, with some recitations and lecture work to emphasize and drill on particular points. Emphasis is placed on technique and a thorough understanding of the chemical principles involved in chemical analysis. A brief outline of the course includes: qualitative analysis of the groups of metals; unknowns from the groups of metals; qualitative analysis of the organic materials found in foods or their preparation. Prerequisites: General Chemistry and Food Chemistry.

Fee: $10.00. 1st Sem.; S. S. Credits: 3

FOOD ANALYSIS

This is a course in quantitative organic analysis with special reference to teaching standard volumetric and gravimetric methods used in the ordinary examination of types of food products. Included in the analysis are milk, cream, syrups, oils, fat, and cereals. Prerequisites: Qualitative Analysis.

Fee: $10.00. 2nd Sem.; S. S. Credits: 3

PHYSIOLOGICAL CHEMISTRY

This course presents the essential chemical facts pertaining to life processes. The composition and nutrition of the physical units of organization, i. e., cells are studied in connection with processes of maintenance, repair, and growth in plants and animals. The laboratory work includes experiments and demonstrations on fermentation; respiration; salivary, gastric, pancreatic, and intestinal digestion; absorption; tissue composition and function; excretion. Prerequisites: General and Food Chemistry; Qualitative Analysis.

Fee: $6.00. 1st Sem. Credits: 4

TEXTILE CHEMISTRY

This course includes the identification by means of the microscope of fibres and substitute materials, the chemical examination of fibres, including tests to determine content of cloth, and adulteration; the classification and application of dyestuffs; home problems in dyeing; the quantitative determination of adulterants; the removal of stains; and the proper use of materials in relation to cleansing and laundering.

Lecture work accompanies the reference work assigned for study, and gives basis for the laboratory experiments. Prerequisite: Qualitative Analysis.

Fee: $10.00. 2nd Sem.; S. S. Credits: 3

MICROBIOLOGY

The subject matter of this course deals with the influence of such micro-organisms as bacteria, yeasts and molds upon home and every-day life. The bacteriological problems of personal and public hygiene and sanitation are considered in both laboratory and classroom, and are closely related to the work in the Household Arts. The course is prefaced by a brief review of the principles governing plant physiology, modified to serve the needs of students as a preparation for their study of micro-organisms which affect the home. In this introductory course, such topics are considered as: the general nature of organisms, composition of protoplasm, structures of a living cell, the processes of respiration, digestion, growth, reproduction, and sex hygiene instruction. Throughout, the physiology of micro-organisms is compared with that of ordinary plant life. The common household molds are then discussed as to morphology, growth, reproduction, use, and control; work on the yeasts follows, and attention is directed to the general nature of the yeast plant, conditions favorable for its growth and reproduction, the utility of yeasts, history of bread making, commercial varieties of yeasts, and a comparison of their value. Bacteria are next studied and their structure, mode of development and reproduction are discussed.

The useful and harmful effects of bacteria are considered and emphasis is placed upon the influence of these organisms in relation to food preservation, the nitrogen cycle, the arts and industries, water and milk supplies, immunity and disease. Prerequisites: Physiology and Hygiene, Food Chemistry.

Fee: $5.00. 1st Sem.; 2nd Sem.; S. S. Credits: 4

COURSES IN SANITATION AND HEALTH

HYGIENE AND SAFETY

This course treats the subject from the standpoint of school hygiene. Topics are developed to include, lighting, heating, ventilation, plumbing, seating, planning the shop, etc. Safety undertakes to give the student knowledge of fundamentals relating to the care and safety of pupils and includes, fire and fire prevention, electrical hazards, safe guards for machinery and their operation, proper clothing. 1st Sem.; 2nd Sem. Credit: 1

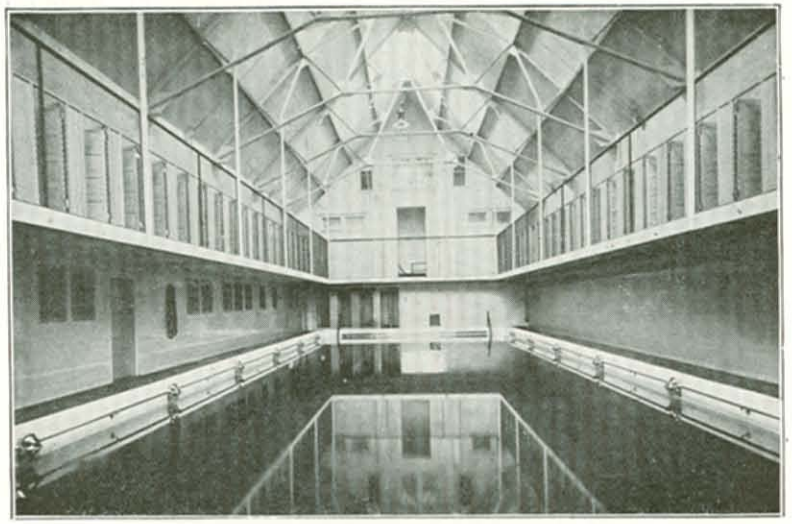
PHYSIOLOGY AND HYGIENE

This course is planned for the purpose of teaching, (a) The structure and function of the body, organs, and tissues; (b) personal hygiene and individual health; (c) public hygiene and general health; (d) physiology and hygiene in relation to the school child. A textbook is used, supplemented by reference work. The subject of sex hygiene is given in a series of lectures by the instructor. Organization and presentation of subject matter and vital present-day school problems of hygiene are discussed. 1st Sem.; 2nd Sem.; S. S. Credits: 2

PHYSICAL EDUCATION

The work in the gymnasium is given first for corrective purposes and second to acquaint those who are interested, with the method of supervising or conducting this work in the grades and high schools. Many calls come for students who can combine gymnasium and coaching with their regular work. Students are given a wide range of work which includes marching, tactics, free exercises with and without hand apparatus, aesthetic and folk dancing for the women and heavy apparatus for the men.

Fee: $1.00. 1st Sem.; 2nd Sem. Credit: 1 or 2



THE STOUT SWIMMING POOL

SWIMMING

Both men and women have access to the swimming pool. Beginners are offered privilege of learning to swim and to those already proficient, the more advanced strokes and dives are taught. Fee: $1.00.

HOME NURSING

The course in home nursing aims to give a practical knowledge for the general care of cases of illness in the home which do not demand professional nursing skill, and of accidents and emergencies which may occur in the home, schoolroom, or elsewhere. Theory is supplemented by practical work wherever possible. Work is given in the choosing of a series of lessons suitable for various classes of pupils such as public school classes and continuation school classes. A textbook is used, supplemented by reference work. 1st Sem.; 2nd Sem.; S. S. Credit: 1

COMMUNITY HYGIENE

This course deals with problems concerning the conservation and promotion of the health of a community. It includes such hygienic work as study of a pure water supply, sewage disposal, milk and food inspection, control of infectious disease, health organization, child welfare movements, industrial hygiene, war

sanitation, village improvement associations, and health exhibits. Opportunity is given for laboratory training necessary to qualify students to make tests to detect the germs of tuberculosis, diphtheria or typhoid in suspected material, as performed by public health laboratories. The health conditions of different local food supplies are investigated and graded. Fumigation and the action of disinfectants on disease organisms are carefully studied in classroom and laboratory. Training is given to enable the student to assist in promoting public health movements by her knowledge and co-operation in every locality where her work may fall, either directly in health laboratories or indirectly through education. Prerequisite: Microbiology.

Fee: $5.00. 2nd Sem.; S. S. Credits: 4

COURSES IN ATHLETIC COACHING AND SWIMMING

ATHLETIC COACHING

The demand for teachers of manual training who can, in addition to their regular duties, coach athletics, is daily becoming more acute. The aim of this course is to develop teachers who can combine these two and do justice to both. A large part of the time is devoted to field work, the student having the opportunity of observing as well as actually participating in the organizing of the various teams, the development of team play and finally the more specialized types and features of the game. Instruction usually precedes the field work, after which a general discussion of the work just covered is held. Problems in administration, development of material, organization, regulation and management of athletics as played in the high school and college make up a large part of the theoretical work of this course. Work is offered in three lines of athletics, all at different hours of the day, so that a student may elect any combination he chooses. Students are requested to bring suitable costumes. These courses given in summer session only.

FOOTBALL

The course in football aims to approach the subject from the viewpoint of the College, particular attention being given to the adaptation of such methods as can successfully be used in high

A sample Stout Basketball Team. This one, the 1921-22 team, won nine games in a ten game schedule and tied for the championship of the northern half of the Wisconsin Normal Conference.

schools. This course is essentially practical, most of the work being done on the field. Topics discussed and covered are: Coaching ethics, equipment of players, training and conditioning, treatment of injuries, hardening up exercises, kicking, catching and passing, blocking, charging, interference and falling on the ball, carrying the ball, opening holes and tackling, punting, drop kicking and place kicking, judging and returning punts, generalship, scouting and field zone of play, various systems of offense and defense, play shifts and formations, discussion of the rules. A series of pictures showing both Eastern and Western teams in action will be studied.

Fee: $1.00. S. S.

BASKETBALL

Students in basketball have the opportunity of going on the floor and learning the game under actual practice conditions. A few regular games are to be played at the close of the course in order to permit the demonstration of points covered. Talks are given on: equipment, training and conditioning, goal shooting, passing and dribbling, stop turns, reverse turns, and jump turns,

foul throwing, guarding, blocking, hook shot and bounce passing, systems of offense and defense, selection of men, plays and formations, discussion of the rules.

Fee: $1.00. S. S.

TRACK AND FIELD

The course in track and field work embraces training and conditioning, development of form, speed and endurance. Each event will be taken up in detail, the rules governing and the development of technique discussed.

Fee: $1.00. S. S.

SWIMMING FOR MEN

The swimming pool, 37 by 87, ranks among the first ten largest tanks in educational institutions in the country. Over one hundred thousand gallons of water are kept at a uniform temperature at all times. A constant three-inch inflow, together with chemical means, insures cleanliness.

To beginners is offered the privilege of learning to swim, and to those already proficient an opportunity to develop leadership in swimming and facility in strokes with which they are not thoroughly acquainted.

From the recreational standpoint, the swimming pool is easily one of the most popular features of the summer session, both teachers and students enjoying a helpful and pleasant addition to their summer study.

Fee: $1.00. S. S.

SWIMMING FOR WOMEN

A course in swimming for women is offered again this summer session to meet the large demand of recent years for this form of instruction and recreation. Beginners are taught to feel at home in the water, and for those able to take more advanced instruction, the more difficult strokes and dives are taught.

Fee: $1.00. S. S.

COURSES IN HISTORY

AMERICAN HISTORY

The purpose of this course is to give the student a familiarity with American history in order that he may understand why American social, political and economic life is what it is. This is not a course in industrial history, but industrial and economic

conditions are emphasized as necessary to the carrying out of the purpose of the course. Special study is given the European background of American history, past and present; the geographical background of American history; the growth of democracy through the agency of free land; territorial expansion of the United States; labor problems, the tariff, and conservation of all natural resources. The last twenty-five recitations are given to the study of American history since 1907.

1st Sem.; 2nd Sem.; S. S. Credits: 5

MODERN HISTORY

This course is aimed to give the student sufficient understanding of the most important events during the past hundred years in order that he may better understand the changes that are taking place in Europe today. The work is so arranged that some time is given to a study of present day conditions in Europe. The following topics are studied: the reconstruction of Europe at the Congress of Vienna; Europe after the Congress of Vienna; political changes in various European countries between 1815-1848; the unification of Italy and Germany; the German Empire; France under the Third Republic; the political and social changes taking place in England during the nineteenth century; the extension of the British Empire; Russia in the nineteenth century; Turkey and the Eastern question; expansion of Europe in the nineteenth century; the world war and its causes.

2nd Sem.; S. S. Credits: 3

INDUSTRIAL HISTORY

This is a course in American history with especial emphasis laid upon the industrial development, and is in no way a duplication of any other work being offered. The first part of the course takes up the growth and development of our present industrial system and is followed by an intensive study of the present day situation. The topics studied are: the physiographic provinces of the United States; inland waterways and portages; natural resources; the economic situation in Europe in the fifteenth century; the industrial contributions to America of the Indians, French, Spaniards, Dutch, and early English; the business side of American colonization; colonial land tenure and agriculture; the rise and growth of manufacturing and commerce; the economic aspects of the American wars; the expansion of

the United States; the economic effects of inventions; finance in peace and war; the tariff question; the labor problem; immigration; conservation and reclamation.

1st Sem.; S. S. Credits: 3

CONTEMPORARY HISTORY

This course is organized to give the students an understanding and appreciation of present day social, political, and economic questions. Students taking this course should have an understanding of modern American and European conditions. The international relations of the United States are studied as well as the domestic questions. The topics vary from year to year, depending on the question of the times. This year an intensive study was made of the present government of the recently formed or reconstructed countries of Europe, including Austria, Hungary, Germany, Poland, Czecho-Slovakia, Jugo-Slavia, Poland, Finland, Russia and Albania. The present status of Ireland and the Central American Republics are also studied.

1st Sem. Credits: 5

COURSES IN ENGLISH

ENGLISH COMPOSITION

Presentation of such phases of composition work as will give the student a command, both in speaking and writing, of simple, correct and clean-cut English, is the aim of this course. The special topics considered vary with the needs of particular classes. In general these topics may be designated as grammatical forms; sentence structure; choice of words; social and business correspondence; the preparation and organization of literary material. The work is closely correlated with that in other departments and is based on long and short themes, talks, discussions, and papers, presented by members of the classes.

1st Sem.; 2nd Sem.; S. S. Credits: 5

LITERATURE

The purpose of this course is to gain an understanding of the essay, of the poem, of biography, and of fiction as forms of literature. A study outline is followed for each classification. A further aim is to read extensively from a list of standard American and English writers of these different forms of literature.

Individual interpretations are given through readings and critical reports, both oral and written. Prerequisite: English Composition. 1st Sem.; S. S. Credits: 3

DIRECTED READING

Directed Reading is given to develop an interest in the reading of good literature of various kinds and to train the student's critical ability and habits of reading in a way likely to be helpful and productive after his school-days are over.

The student's interests will be made the basis of selection, but the purpose of the work will be to broaden and direct these interests in a practical, educational way. Through his own reading, each student will come into direct contact with all types of literature and will build up constructive ideas of what may be expected of good books.

The classwork will aim to develop facility and accuracy of expression through oral and written reports of reading done during the week. This will be accompanied by group discussion and comparison of ideas and reports.

Classes meet once a week. Three credits in Directed Reading are required of the students in the Industrial Arts diploma course, two credits of those in the Household Arts diploma course. In advanced work in Directed Reading, two credits are required of Seniors in both departments, and one credit of Juniors.

1st Sem.; 2nd Sem.; S. S. Credits: 1 per semester

PUBLIC SPEAKING

The aim of this course is to master, as far as possible, the fundamental requirements for ordinary public speaking. The nature of the work is threefold—mechanical, interpretative, and constructive. The mechanics include such technique as is necessary for a foundation. Proper breathing, pitch, inflection, articulation, pronunciation, phrasing, emphasis, rate, bodily pose, are presented in a simple manner with accompanying exercises. The interpretative phase consists in interpreting orally the words of another. The constructive side is emphasized most, and gives practice in organizing and presenting original and practical productions. Prerequisite: English Composition.

1st Sem.; 2nd Sem.; S. S. Credits: 2

THESIS WORK

As a requirement for graduation every student in both the Industrial and Household Arts Departments must submit a thesis. This represents original work and is selected by consultation with the heads of each department. For degree thesis credit is given.

Credits: 2

COURSES IN SHOP WORK AND DRAWING

Fees are indicated for quarter (9 weeks) or semester (18 weeks). Roman numerals indicate 9 week steps in advancement.

The shop work and drawing in the first and second years will include six or more subjects, to be determined by the director. The work offered in the third and fourth years will be specialization in the shop work taken in the first and second years or new work.

CREDITS FOR SHOP AND DRAWING COURSES

Each course here listed requires at least two and one-half semester hours of work and two and one-half credits are granted for completion. Most of the courses have an additional two and one-half semester hours of work open for those who desire it. In some courses five additional semester hours are possible. Full credit is granted for the full number of semester hours taken.

DRAWING

ELEMENTS OF MECHANICAL DRAWING

This course is composed of 21 drawings and tracings starting with elementary line work, geometric drawings, projection drawing and developments, working drawings, including isometric drawings. A reasonable amount of time is given for the completion of each drawing. Good drawing technique is required before drawings are accepted. More advanced work may be had by students capable of doing it.

Organizing of courses in elementary mechanical drawing suitable for high school work is taken up.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

ARCHITECTURAL DRAFTING

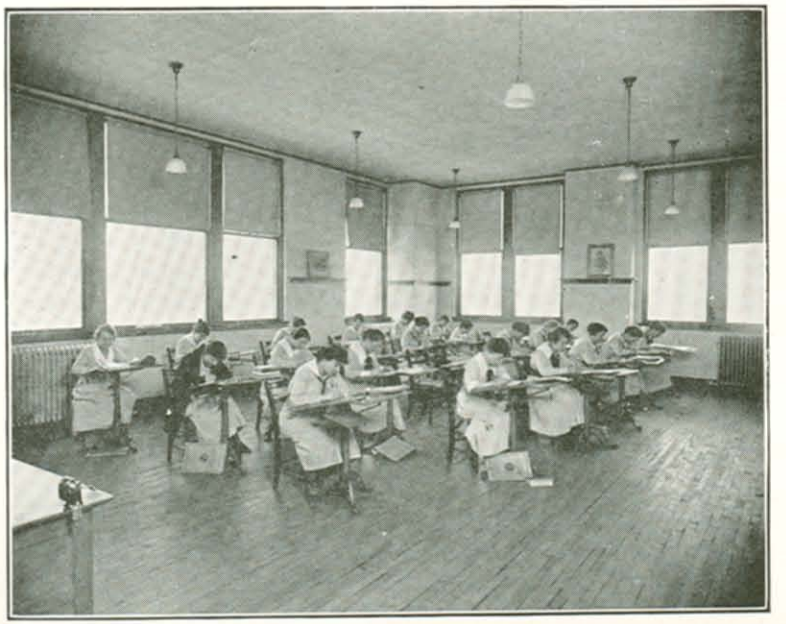
In the first nine weeks, Architectural Drafting I, details are taken up of the various parts of a building and drawings made, including windows, cornices, stair details, etc. A set of plans is drawn for a small residence, either frame, brick or stucco, keeping to a certain floor area, and cost. Details are made and a perspective.

In the second nine weeks, Architectural Drawing II, planning a fire-proof apartment building or residence is covered to cost $15,000, along colonial lines:—making ¾-inch scale details, and perspective. Pen and ink rendering and color work are given to those who are capable of handling this work. Writing specifications and estimating. Reference reading is required during this course. Modern drafting methods are used.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

MACHINE DRAFTING

Machine Drafting I requires a thorough knowledge of the principles of orthographic projection as gained in Elements of



DRAWING AND DESIGN CLASS

Mechanical Drawing or an equivalent course. A brief study is made of the necessary preliminary work, including forms of screw threads, nuts, bolts and their conventions. The preparation of working drawings is then taken up; the students securing their material from dimensioned perspectives, from type form drawings and tabular or formulized data, and from sketches they will make from actual machine parts. Detail drawings, sectioning, assembly drawings from the details, and details from assembly drawings will make up the main body of the course. These problems will be arranged in an order of increasing difficulty with special attention paid to their application to the work given in the machine shop.

Text: French, Engineering Drawing.

Machine Drafting II first takes up the problems of belt gearing, speeds of shafts, counters and machines. The major portion of the work consists of an individual study of a simple appliance or machine such as might well be built by advanced machine shop classes in technical or vocational schools. A complete set of drawings for the project selected, including all details and assembly will be made and traced by each student; particular attention is given to trade standards and practices. Individual work will be required and at the close of the course blue prints may be exchanged by members of the class so desiring. In this way each student has his own tracings as well as blue prints from the other projects available as specific aids in later work.

Text: French, Engineering Drawing.

Machine Drafting III is made up of the study of cams and gears. The more common forms of motion are analyzed and different types of cams laid out which will produce these motions. Various forms of followers which may be used in connection with these cams are also studied and drawn out. The involute system of gearing applied to spur and annular gears, pinions, racks, bevel gears and the worm and worm-wheel is taught by direct application to specific problems. The simpler forms of the helical gears are taken up but no attempt is made to make this phase of the work exhaustive. Special emphasis is placed upon accuracy of technique and a thorough understanding of the principles involved.

Text: Keown, Mechanisms.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

WOODWORK AND BUILDING TRADES

ELEMENTS OF WOODWORK

This work is for the distinct purpose of acquainting the students with the correct use and care of the fundamental bench woodworking tools and with the various materials used. Two textbooks are used supplemented by reference books, catalogs and magazines.

The following outline is suggestive of the work of the course: (a) Saw filing—three exercises are given in the study, laying out and cutting of the teeth. These are followed by the complete fitting of rip and crosscut saws—one or more of each. (b) Grinding and sharpening of chisels, plane bits, spoke shaves, and augur bits. (c) Planes, chisels and saws studied and used in the making of several exercises and projects which have been designed or selected with especial reference to the variety of typical uses to which each tool may be put. (d) Other common woodworking tools used and studied. (e) Typical joints and constructions are made and tested. (f) Lumber, glue and other materials used and examined.

Fee: $3.50, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

WOOD TURNING

Wood turning is given to teachers of Junior and Senior high school classes and vocational classes. Problems designed for development of skill and the acquiring of fundamental operations such as are essential in turning are likewise given. Exercises such as cylinders, concave, convex, and combination curves are turned in soft wood, followed by applications in hardwood, such as: file handle, vise handle, oval hammer handle, mallets, and gavels.

A second group involving face plate work is given, consisting of: rosette, towel rings, picture frames, trays, bowls, goblets, candle sticks, lamp stands, etc. Students are introduced to power machinery and get instruction as to care of lathe and tools. Discussions cover the selection of equipment, planning of courses in wood turning, and methods of teaching the subject.

Fee: $2.00, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

CABINETMAKING I AND II

Case construction or cabinetmaking may cover a large range of variable methods of making a cabinet, and as it takes from three to four years to enable one to work as a practical cabinetmaker, it is quite a problem to cover portions really worth while for so short a time as can be devoted to it in school work. With this in mind, a small case is planned to cover as varied a range as seems possible for the time available, or equipment may be built for the institution. This necessitates previous woodworking experience, as the work is rather advanced and time does not permit elementary features being covered.

The practical work consists of: Making a mill bill from complete, detailed blue prints of the project undertaken, figuring lumber bill and selecting material that will cut to good advantage; ripping, planing, cutting to lengths, and jointing of stock by power-driven machinery; face marking and laying out stock, followed by mortising, tenoning, grooving, relishing, gaining, beveling, tapering and rabbeting, etc., as required for good construction of particular project involved. All the work possible is done as in commercial practice. Then follows the bench work and assembling, fitting of sections together, making veneered panels, gluing and clamping of tops and joints, smoothing in various ways and at proper time, fitting together and assembling of sections, fastening of tops, fitting drawers and doors, hanging doors, fitting hardware, and the final smoothing and cleaning up of project to prepare for staining and varnishing.

The informational side of the work is covered by talks, demonstrations, illustrations, and individual help; first, that which has a direct bearing on the work to be done, as above described, and as much additional related information as time permits, drying and care of lumber, moisture content, tests of lumber, proportioning the size of members based as near as possible on standardized stock, application and proportioning various joints. Advice as to precautions against accidents when working around machines, different ways of doing the work, trade terms, and order in which to give dimensions in various specific connections. Prerequisite: Millwork I. Fee: $2.00, Sem.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

MILL WORK I

MACHINE WOODWORKING

This course is provided for the purpose of instruction and practice in the care and use of woodworking mill tools and machinery, and especially in methods of precaution against accidents in operating. The work is offered principally to prepare vocational teachers for their personal use of such machinery, in schools where they are expected to be entrusted with the care and operation of woodworking machines. A large mill equipment furnishes an opportunity to do one or several of the following lines of work such as may be created by the needs of the institution. Work is begun with the cutting of stock for projects in other classes and at times followed by figuring out mill bills, cutting stock, laying out, mortising, tenoning, sticking or moulding, relishing, grooving, gaining, and rabbeting, as demanded in the making of such work as lockers or desks, tables and work benches of various kinds, built-in cabinetwork, interior finish, stair work, sash, doors, screens, and mouldings. Any of the above include only the mill end of the production by the use of power machinery, unless by request on the part of individuals who would like to do some of the assembling and bench work which follows milling. In addition to this is offered such work as is required in the upkeep and care of tools and machinery, namely: jointing, gumming, swaging, setting, filing of saws; keeping jointer knives and other edge tools sharpened; belt lacing, kinds of belting, etc., splicing, or lacing, care, speed, and adjustment. Lectures and demonstrations are given on: Classification of lumber, standardized sizes, grades, etc. Routing processes of both stock and students through the shop. Machine and cutting speeds, cutting clearance, types of heads, and kinds of cutters; knife bevels, clearance, grinding and setting. Prerequisite to Cabinet I and II and also to Mill Work II. Fee: $1.00, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

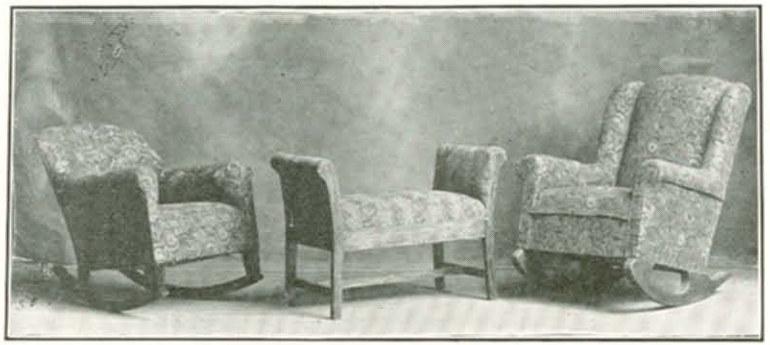
MILL WORK II

This course is offered for the students who after having had Mill Work I desire to continue their woodworking machine experience. For the present not more than three students can be accommodated at one time. The work in this course will be continuous full working periods during which time each student

will be assigned to saw fitting, knife grinding and setting, machine setting and alignment with motors, care of belts, and their adjustment, rabbeting, scraping and running in of bearings, or bearing adjustment. The work will be carried on by reference to notes taken in Mill Work I, plus some book and magazine reference and individual coaching. Prerequisite: Mill Work I.

Fee: $1.00 per Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.



UPHOLSTERED IN STOUT SHOPS

FURNITURE UPHOLSTERING

This course is planned for teachers of woodwork in high schools and vocational schools. The following topics indicate the nature of the work in the course: upholsterer's tools and equipment; materials used; cost of materials and equipment; making cushions; chair frame construction for upholstery; pad seat and pad back upholstering; the spring seat and spring back; curved back upholstering; study of leathers, tapestries and other coverings; planning and cutting the covering material; repairing upholstered furniture.

The work of the course will consist of the making of several exercises which give practice in many of the upholstering operations and processes. After the exercises each student may upholster a complete chair for himself or work on chairs provided for the purpose. Lectures and demonstrations will be given on topics indicated, even though each student may not have time to do work in all.

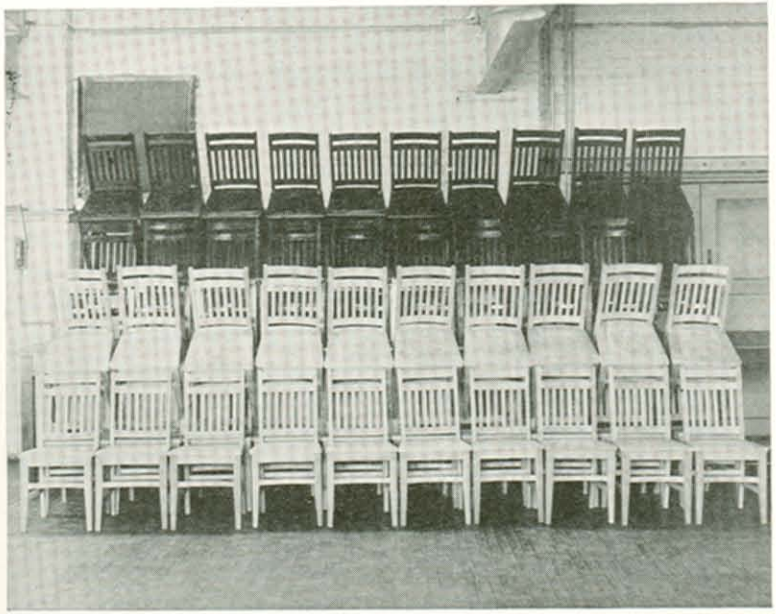
Fee: $4.00, Quarter. S. S. only. Credit: 2½ each qtr.

WOOD FINISHING

The work offered in wood finishing covers in part the making of a series of panels of different widths. The surfaces are planed, scraped, sand-papered, stained, filled, and polished, showing the method and value of different types of finish as pieces of regular sequenced work. In addition to this, students are given practical work in painting, interior finishing, and the finishing of furniture. Lectures are also given covering the following: Preparation of the wood; planing, scraping, and sanding; stains and staining; production and use of different stains; formulae for making water and spirit stains; fuming; fillers and their compositions and use, methods of filling hard and soft woods, open and close grained woods; wax, its character and preparations, different uses; rubbing with sand paper, with pumice stone; polishing, use of curled hair; use of steel wool; selection and care of materials; commercial practice in wood finishing; suggestions for handling wood finishing in school shops.

Fee: $4.50, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.



A production problem constructed by high school practice classes under Stout student teachers.

CARPENTRY I

Work in this course is of a decidedly practical character and is intended to help fit the individual for vocational and trade school teaching as well as for the public school work. As framing is the first work done on a carpentry job, so it is usually the first to be introduced in school work. Full sized cottage construction, together with such exercise work as may be necessary for the development of sufficient skill, is given in this course. Emphasis is placed on the operations and constructions that are different from those found in bench woodwork and that are fundamental in frame building construction.

The work consists of floor framing, including: laying out, cutting, and setting sills, joists, bridging, headers, trimmers, laying sub floor, squaring and leveling the floor frame; wall framing, cutting, and setting plates, studs, headers, trimmers, rib-band, and gable studs, plumbing and bracing walls, erecting scaffolding, and sheathing walls; roof framing, figuring span, run, rise, pitch, and rise per foot, laying out with steel square the lengths and cuts, and cutting and setting common, hip and valley, jack, and cripple rafters; laying out and framing dormers and openings, sheathing roof, setting cornice finish, shingling, setting window and door frames, setting outside base and corner trim, spacing cutting, and nailing siding; porch work. Workmanlike methods of application of processes are stressed.

The theoretical work given in connection with the tool processes and constructions includes a discussion of the braced and balloon types of frame, a comparison of various methods in framing floors, walls, and roofs, and a study of various types of roofs and cornices by means of blackboard drawings. Lectures and demonstrations are given on the use of the steel square in laying out and spacing joists and studs and in laying out the lengths and cuts of rafters. The kinds, grades, sizes, and prices of framing lumber are taken up and studied with regard to intelligent selection for particular purposes. Nails and builders' hardware are given consideration in the same way. Figuring and listing materials are given as outside work.

Fee, $2.00, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

BRICKLAYING

Elementary bricklaying is planned to cover practical problems used in trade work suitable for vocational schools. Only practical problems are given in this course. Lectures are given out on mimeograph sheets, together with drawings of all problems. Estimating job work and material is taken up. Demonstrations are given at various times, of laying brick under actual working conditions. Advanced work is available for those capable of undertaking it.

Fee: $5.00, Sem. 2nd Sem.; S. S. Credits: 2½ each qtr.

PATTERNMAKING

The patternmaking courses take up the technical details of the trade in a simple way. The student makes a number of exercises embracing the fundamentals so that he may be prepared to teach them to high school or continuation school students. The actual work consists of bench and machine woodwork and woodturning. Instruction and demonstrations cover the use of machine and hand tools, application of patternmaking principles, methods of construction, methods of turning, and methods of finishing the exercises. Advanced or individual problems are assigned as soon as the student develops special ability. The work is limited only by the amount of time the student has available.

Fee: $3.50, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

METAL TRADES

MACHINE SHOP

The beginning of the course is so arranged that each man will progress from one machine to another and will have done enough work on each to have an acquaintance with the scope and the typical processes of each. The exercises for the elementary work are selected to embody the fundamental principles incident to the machines. For the advanced work the exercises made are selected with the idea of being typical of certain processes; fortunately a large number of these are also of practical value. Small tools, as milling cutters, reamers, taps, gauges, forming tools, jigs, and templates are made. Also parts of steam engines, motors, and the machinery of the shop are made. In some cases the original exercises are designed and the tools necessary for the construction of the exercise by a class are designed and built.

Fee: $3.00, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

FORGE WORK

In Forging I the student masters certain preliminary matters such as building of fire, proper position at anvil, proper handling of tools and equipment. Each problem in the course is more or less dependent upon the preceding problem, but offers new information and practice for the student. It is recognized that the ability to teach these operations is as important as the skill involved in the working of iron and steel. Outside reading relative to the history of the trade manufacture of iron and steel, equipment, and forge fuels, is required. A limited amount of instruction is given in the working of tool and spring steel.

Forging II is a course in general blacksmithing and tool smithing in which the forging, welding, hardening and tempering of spring steel and tool steel are carefully covered. Considerable time is given to tool dressing and polishing, and the use of oxy-acetylene welding and cutting equipment. It is intended to give a proper working knowledge of the trade necessary to enable the student to give workmanlike demonstrations accompanied by the proper explanation necessary for efficient teaching. A course in elementary forging or practical trade experience is prerequisite.

In Forging III it is intended that this shall give a fair working knowledge of the trade which is necessary to successful teaching in this work. The work covers general blacksmithing, tool steel work, some ornamental iron work, and oxy-acetylene welding and cutting. The standard of workmanship expected in this course should compare favorably with that of the average journeyman smith.

Fee: $5.50, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

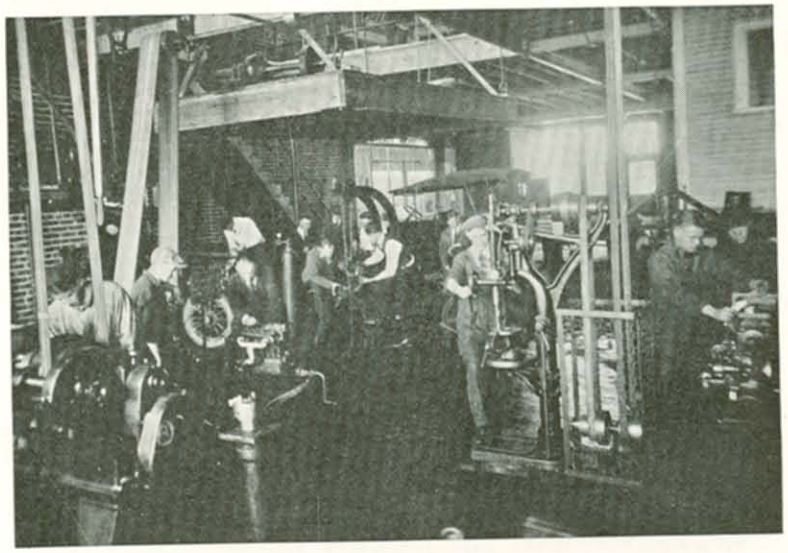
FOUNDRY

The aim of this course is to train the student so that he will be able to handle the foundry work that is ordinarily given in a high or vocational school. The making of typical molds is taught, and because of its importance, cupola practice is given a large amount of time. Castings are poured in aluminum, brass, and iron. Core making and dry sand molds open up the field and show the possibilities of this work. A large assortment of patterns is available for use so that at no time need the work become monotonous. Castings of the exercises for use in the machine shop are made in large numbers, as well as castings for parts of machines and repairs. While molds of things of no practical

value are often made, these molds are seldom poured. The theoretical work is covered by short talks at the start of each period, the subjects following as closely as possible the work being done.

Fee: $3.50, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.



AUTO MECHANICS

In this shop the student secures instruction in all phases of auto repair and maintenance. The equipment is adequate for all varieties of typical jobs.

OTHER SHOP COURSES

PRINTING

The work in the first nine weeks, Printing I, acquaints the student with the fundamentals of the printing industry with the view of forming proper habits of work and securing an appreciation of the standards of printed product. The general outline of the course is based upon the proper sequence with which the commercial shop operates, starting with straight composition at the type cases, proofing, correcting, imposition, platen press work, and binding. The shop work is supplemented by lectures where a detailed study is made of ink, stock, stock problems, type faces, and approach to display problems.

The work in the second nine weeks, Printing II, is a continuation of Printing I and consists of more advanced problems in composition, imposition and press work. Much practical experience is gained by work on the Weekly Publication, which involves ad composition, newspaper makeup and construction, and also the printing of many commercial forms. The lecture periods are devoted to typographical architecture, design, color theory and harmony, and cost calculation. The work in Printing I is prerequisite.

The third nine weeks, Printing III, is more extensively a shop course intended for specialization of students who are preparing to teach this subject. Many of the higher grades of printing processes are practiced during this course, such as three-color process work, and embossing, while other modern methods are studied and observed. The lecture periods are devoted to the organization of vocational and public school courses, selection and costs of equipment, and a study of the general scope of the printing industry. The work in Printing I and II is prerequisite.

Printing IV, Machine Composition, is an extended study of both Linotype and Intertype machines, which have recently been installed for teacher training. This course is equally divided between the mechanism and the operation of the machines, and is intended to fit teachers not only to instruct and care for machines, but also make any necessary repairs. Owing to the limited number of machines this course is restricted to students who have attained a grade of above average in the three prerequisite courses in printing, or by special concession to those having an equivalent of practical trade experience before entrance.

Fee: Printing I, II, and III, $1.50. Printing IV, $3.00.
1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

AUTO MECHANICS I, II, III

Auto mechanics work is offered in four nine week courses. Students taking the first course are given three weeks' work on the study and tests of the ordinary two and four cycle gas engines. For the remainder of the first nine weeks, they study and repair different parts of the chassis not including the motor. The second course deals with the motor, and general repair work such as comes in the ordinary garage. The third course is devoted entirely to auto electrical work, including starting, lighting and ignition. Four weeks of this course is taken for battery work.

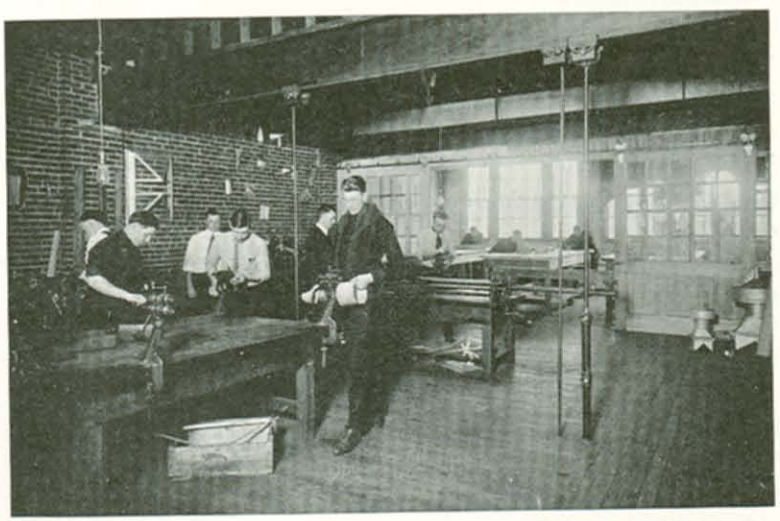
Students are advised to take the courses in order. While Auto Mechanics I is not a prerequisite for Auto Mechanics II, Auto Mechanics II is, however, prerequisite for Auto Mechanics III. The work is laid out on the unit basis, each unit complete in itself, thus making desired selections possible. The shops are well equipped for the work in the four courses in Auto Mechanics.

Auto Mechanics IV is offered for those who intend to teach this kind of work. The shop work consists of a complete overhauling of several cars. Along with this the student is required to lay out a definite plan of procedure by units. As the work progresses a record is kept of all work done including a report of the repairs and adjustments needed and made, and of new parts installed.

Fee: $2.00, Quarter.
1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

SHEET METAL WORK AND PATTERN DRAFTING

The course in Sheet Metal I covers the application of such fundamental principles as cutting, forming, seaming, notching, wiring, hemming, and soldering in the making of tinware, gutters, pipe intersections, cornice work, and problems pertaining to heating and ventilating work.



PART OF SHEET METAL SHOP

Sheet Metal II is a study of the making of bins, tanks, and other rectangular containers; furnace boots, leader heads and irregular fittings for ventilating, grain conductor work, and the like. Most of the pattern drafting work in this course is done by triangulation.

In Sheet Metal III much time is devoted to first class production and to the more advanced problems connected with heating, ventilating, skylight work, metal window frames and sash, and architectural ornaments. In this course some time is devoted to the workings of brass and copper.

Fee: 1st Quarter, $5.00; other Quarters, $4.00.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

ELECTRICAL WORK

The shop has been equipped and courses are offered to meet the increasing demand for teachers of electrical work. New equipment is being installed as fast as conditions permit. Three nine week courses are offered. The first course of nine weeks, Electrical I, takes up the essentials of electricity and deals largely with direct currents. A large part of the laboratory work consists of wiring for different types of circuits. Some time is devoted to the study of different types of generators, motors, and starting rheostats, also to the study and use of measuring instruments.

In the first half of the second nine weeks, Electrical II, a study is made of the different types of armature windings followed by several exercises. A number of tests on direct current generators and motors are also performed. The second half of this quarter is given over to the study of the essentials of alternating currents as applied to alternating current generator, motor, transformer, etc.

The work in the third quarter, Electrical III, is a continuation of that in the latter part of the second quarter, with more attention given to laboratory work consisting largely of jobs of practical nature.

The general purpose of the three courses is to cover the probable initial work to be done in electrical courses in public schools together with the background of electrical theory necessary to properly organize and operate such courses.

Fee: $2.00, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

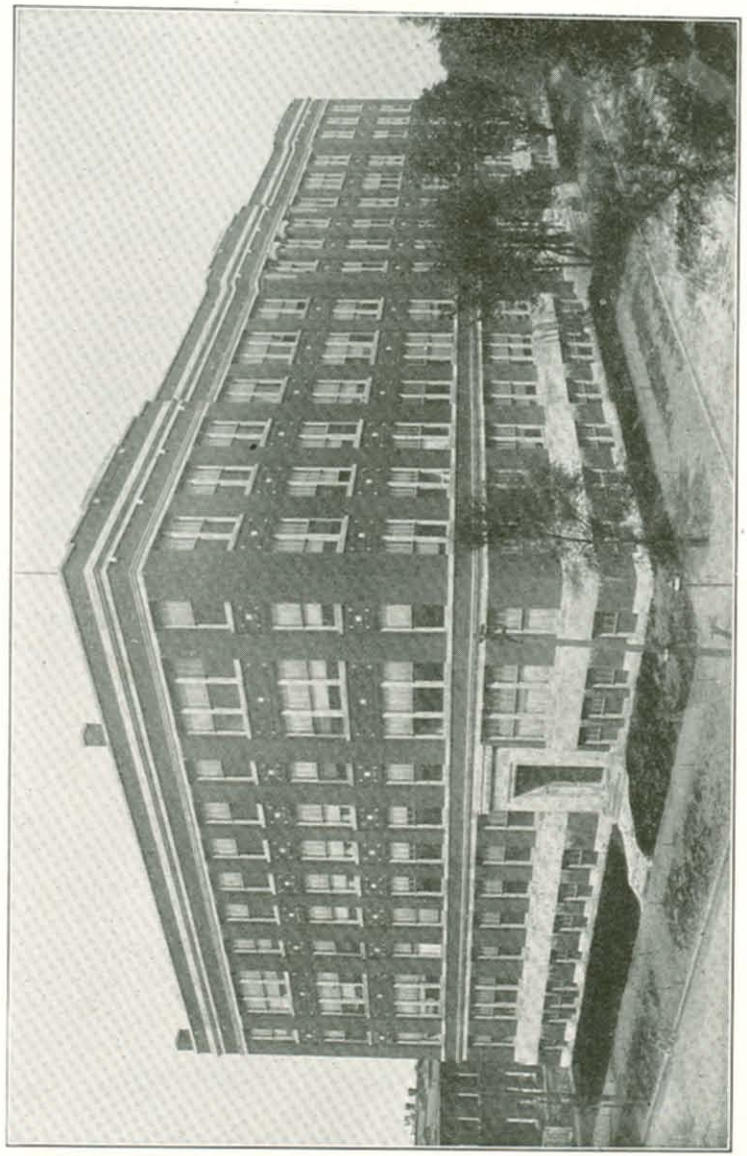
HOME MECHANICS I

The object of this course is to prepare students for the handling of public school classes in the general shop. This is to meet the present rapidly increasing demand for such teachers. Selections of typical jobs necessary in the mechanical maintenance of the home are made the basis for shop assignments. These jobs are grouped according to the present day occupations represented in the upkeep of the home. Students in addition to their mechanical work, are required to make solutions of problems of management necessary to the successful operation of the general shop.

The Home Mechanics shop is a large well lighted room with ample storage and locker space. Bench and mechanical equipment affords excellent opportunity for work in projects in woodwork, plumbing, electricity, woodfinishing, sheet metal repairs, and bench metal work. The shop has twenty fully equipped woodworking benches, with additional equipment for metal work. Sixty feet of general bench space is available for plumbing, electrical, sheet metal and general work. Typical home equipment is available for repair projects. The course is open to Sophomores, Juniors or Seniors who have completed elementary courses in bench woodwork, electrical, forging, machine shop, woodturning, and mechanical drawing. It is essential also that the students be taking or have taken elementary sheet metal.

Fee: $3.00.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.



HOME ECONOMICS BUILDING—CONTAINING ALSO THE LIBRARY, AUDITORIUM AND OFFICES

FOODS AND NUTRITION

COOKERY I

In this first course in cookery, the meal is taken as a basis, and the composition and nutritive value of food materials and the processes of cookery best adapted to each class of foods are studied with reference to it. Principles are illustrated by a series of experiments and by the preparation of simple foods. The practical work is designed to acquaint the student with all the fundamental processes of cookery. It is planned to secure a thorough understanding of the theory and method involved in the cookery of the more essential foods rather than to cover the whole field of cookery. Sufficient repetition of processes is given to secure a fair degree of skill in manipulation of materials and utensils.

Among the subjects emphasized are: the choice and arrangement of appropriate garnishes, correct methods of service, com-

Unit type laboratory equipment, with work table, sink and stove for each two students. In this laboratory may be seen the built-in enameled refrigerators. Refrigeration is secured by a carbon dioxide plant located in the basement.

parison of recipes, substitution and variations, economical use of left-overs, and adaptation of lessons to public school work. Costs and economy in the use of materials are stressed.

Throughout the course, lectures are given and discussions held when occasion demands. Considerable reference work is deemed advisable, as it is one of the aims of the course to bring students in contact with the newest and best books pertaining to this line of work. Prerequisites: Cookery I, General Chemistry.

Fee: $5.00. 1st Sem.; 2nd Sem.; S. S. Credits: 3

COOKERY II

This course is a continuation of Cookery I. The meal is again used as the basis of the work, the projects being more difficult than those given in the first course. Prerequisites: Cookery I, General Chemistry.

Fee, $5.00. 1st Sem.; 2nd Sem.; S. S. Credits: 3

COOKERY III

A.—Food Preservation. This work has as its aim the acquisition of knowledge of and skill in the processes and theory involved in canning and preserving. The work will include: Canning by the different methods—stewing or open kettle, oven, intermittent, cold pack; use of hot water bath, water seal outfit, steam pressure canner, aluminum pressure cooker; drying by means of commercial and home-made outfits; jelly making; conserves and marmalades; pickling.

B.—Fancy Cookery. This sequence is given to give students a knowledge of some of the more elaborate processes of cookery, and of the more unusual food materials and dishes. The point is brought out that most of the lessons in the series have no place in public school work, but may be desirable for some night school classes or other special type; for demonstration purposes, and for the skill and broader knowledge of the teacher. Throughout the work technique is stressed.

Fee: $5.00. 1st Sem.; S. S. Credits: 2

COOKERY IV—MEAL PREPARATION AND SERVING

Short series of lessons on foods suitable for breakfasts, luncheons, suppers, dinners, are followed by the planning and serving of a meal by a group of two, three or four students. Throughout this sequence, lessons are given to review the theory of cookery

and the processes of manipulation. Other aims of this sequence are to give students added skill and rapidity in manipulation; to teach simplicity, appropriateness, and good taste in service; to emphasize the meal as the unit of cookery and to afford practical application of dietetic principles. Special stress is given to the methods of serving meals in public school classes. Prerequisite: Cookery III. Fee: $5.00.

2nd Sem.; S. S. Credits: 3 (one of which is for Methods)

COOKERY V—EXPERIMENTAL

This is a course in laboratory investigation and testing for advanced students to enable them to determine further facts and gain information for practical use in food preparation, and to aid in placing cookery upon a more accurate and scientific basis. The work consists of a qualitative and quantitative study of recipes, and a study of the uses of different food materials and cookery apparatus. Prerequisites: Cookery III and IV, Food Chemistry.

Fee: $5.00. 2nd Sem.; S. S. Credits: 3

FOOD STUDY

The purpose of this course is to give the student a well-organized body of knowledge relating to foods and their value to the body. Also to consider the subject from a professional standpoint, its place in public school work, its relation to other subjects, sources of information and illustrative material available. The course begins with an elementary study of metabolism as a foundation for the detailed consideration of the nutritive value of various foods studied. This is followed by a classification of foods based on their chemical composition. These groups form the natural sub-division of the remainder of the course. The important foods under each class are studied as to source, production, market forms, chemical composition, fuel value, digestibility, place in diet, and principles of cookery, special emphasis being laid on those topics relating to nutritive value. The broader subjects of sanitation, inspection, and standards of purity are given due consideration. Prerequisites: Cookery I, General Chemistry. Parallel Subjects are Cookery II, Food Chemistry.

2nd Sem.; S. S. Credits: 2

NUTRITION I

The purpose of this course is to present the fundamental principles of human nutrition and their application to the feeding of

individuals, families and large groups under varying physiological, economic, and social conditions. It includes recitation and laboratory work and is designed to be used as a basis for practical work in dietetics as well as for organizing and teaching the subject in high school. Sherman's "Chemistry of Food and Nutrition" and Rose's "Handbook in Dietetics" are used as texts for much of this work, but are supplemented by reference reading. A study is made of the functions and nutritive value of foods and the food requirements of individuals and groups of individuals. In the laboratory a study is made of the fuel values of foods; 100 calorie portions of foods are calculated and weighed; family dietaries are planned with reference to nutritive needs and the cost with relation to the family income; the relation of dietetics to the most common diseases of nutrition is considered; suitable dietaries are planned and prepared in the laboratory. A careful study is made of the feeding of infants and young children; modification of milk is taught and dietaries for children are planned and cooked. Many problems of particular interest to teachers of Home Economics are taken up in the class work. Among these are the place of dietetics in the school course, the selection of subject matter, the adaptation of material and methods of presentation for high school pupils, books and pamphlets suitable for reference, and the application of dietetics to cookery. Prerequisites: Cookery II, Food Chemistry, Food Study.

Fee: $2.50. 1st Sem.; 2nd Sem.; S. S. Credits: 4

NUTRITION II

The purpose of this course is to give advanced students a broader understanding of the problems of human nutrition. The work includes recitations and laboratory work. The course includes a review of the principles of digestion and metabolism, the protein, energy, and ash requirement and the function in metabolism of the different proteins, vitamine and ash constituents of the diet. The conditions of the human body under various nutritive deficiencies are studied and the application of scientific principles is stressed in the planning of corrective dietaries. Hospital methods and practices are discussed. The course is conducted by means of lectures, recitations, reading and laboratory work. Prerequisites: Nutrition I, Physiological Chemistry.

Fee: $3.00. 2nd Sem.; S. S. Credits: 4

CLOTHING AND TEXTILES

CLOTHING I

In this course fundamental processes of elementary sewing are given. Emphasis is placed upon good technique and high standards of workmanship. The subject matter, as in other clothing courses, may be considered in the following aspects: design, construction, hygiene, and economics of textile purchase, with particular emphasis given here to the selection of material and trimmings, comparison of home and shop-made garments as to durability, workmanship, and design, cost and ethics. The practical work consists briefly of straight line drafting; the making of useful, simple garments; study of the use and care of the machine; problems in repair work; machine work.

Fee: $1.00. 1st Sem.; 2nd Sem.; S. S. Credits: 2

CLOTHING II

This course is a continuation of Clothing I. The technical work consists of further work in the construction of plain clothing. Both drafted and commercial patterns are studied and used. Throughout both these courses suggestions are made for adapting the class work for public, and other school classes. The clothing budget is the basis for the economic discussion.

Fee: $1.00. 1st Sem.; 2nd Sem.; S. S. Credits: 2

CLOTHING III

This course includes work with alteration and development of commercial patterns. Emphasis is placed upon appropriate lines, materials and colors. High standards of work and details of technique are taught. The finished problems

include a wool dress and separate skirt. The place of each in the high school or vocational school course of study, and the methods of presenting the various phases of the work are developed through discussion. The student furnishes all materials and supplies, subject to the approval of the instructor. Emphasis is placed upon thrift, and intelligent and wise buying. Studies are made in budgets for clothing. Prerequisites: Clothing I and II, Color and Design. Fee: $1.00.

1st Sem.; S. S. Credits 3 (one of which is for Methods)

CLOTHING IV

This is a continuation of Clothing III. The aims are greater independence and originality, skill in handling different materials, speed in construction work, a broader understanding of the scope and content of subject matter in clothing, and increased ability to plan and organize work. Drafting is taught in the making of the washable shirt waist. A silk dress is the final problem of the course. The subject of color is reviewed and emphasized in relation to suitability to wearer and occasion. Other topics of discussion are: Wearing qualities of fabrics and their appropriateness to design, hygienic and economic aspects of clothing. Further professional work is also included. Prerequisite: Clothing III.

Fee: $1.00. 1st Sem.; 2nd Sem.; S. S. Credits: 2

CLOTHING V

This course aims to give opportunity for applying in a practical way, the principles emphasized in Costume Design, and to give further practice in the construction of clothing.

The dress form is used, and designs developed by modelling in tissue paper, muslin or cambric; later, carrying out these designs in actual material. Prerequisites: Clothing III and IV.

Fee: $1.00. 2nd Sem.; S. S. Credits: 4

TEXTILES

The aims of this work, which is given in connection with the above courses, are to give students such knowledge of fabrics and textile materials as to enable them to select intelligently textile materials for school, household, and personal uses, to develop a social spirit with relation to the worker in shop, and factories, and to help students to adapt and use their knowledge

of textiles in the teaching of public and vocational school classes in clothing. A short study is made of the early history of the textile arts and of the causes which led to the present conditions in the textile industry. Then follows an intensive study of the fabrics made from the four principal fibers of commerce, with emphasis on those points which affect the wearing quality, prices, and uses. The student is guided in making a collection of samples of textile fabrics for classroom use. She is, through reference reading, made familiar with the literature of the subject.

1st Sem.; 2nd Sem.; S. S. Credits: 2

MILLINERY

Designing, making, and trimming of hats with a view to developing originality, invention, and skill, are the main purposes of this course. Stress is placed upon the artistic side of the work by the study of the harmony of color and line. Prerequisites: Color and Design I.

Fee: $3.00. 2nd Sem.; S. S. Credits: 2

LAUNDERING

In this course the laundry problem is considered from the point of view of the housewife in connection with the house plan and the organization of work in the house, and from the point of view of the teacher in connection with school equipment and the course of study. The work is based upon a knowledge of the textile fabrics of which various garments are made, and of the chemical reactions involved in the action of reagents used. The laboratory work gives practice in all the processes involved in washing and ironing cotton, linen, woolen, silk, laces, and embroideries. The planning of laundry equipment for school and home and the execution of the family laundry are among the problems considered. The work consists of discussions, demonstrations and laboratory work. Prerequisites: General Chemistry, Textiles.

Fee: $1.00. 1st Sem.; 2nd Sem.; S. S. Credit: 1

ART

COLOR AND DESIGN I

This course parallels Clothing III or IV and is intended to complement the technical course with the artistic motive. It will

include printing, poster work and graphic presentation of material for use in food and clothing classes. Color and proportion as applied to clothing will be taught. The selection and application of decoration as applied to children's and adult clothing and simple household furnishing will be studied. Projects in collaboration with the clothing department in applied design will be undertaken, as well as simple design applied to household furnishing.

Fee: $2.00. 1st Sem.; 2nd Sem.; S. S. Credits: 3

COLOR AND DESIGN II

This course will include the study of the development of decorative design through the most significant historic periods. This theoretical work will be accompanied by intensive study in the selection of design for china, glass, linen, silver, lighting fixtures, pillows, table covers, vases, picture frames, bric-a-brac, and clothing, trimming, shoes, hats, jewelry and dress accessories.

Some poster work will be continued in connection with the dramatic work of the school. Practical applications of design in connection with advanced problems in clothing and house furnishing will be undertaken.

Fee: $2.00. 1st Sem.; 2nd Sem.; S. S. Credits: 2

COSTUME DESIGN

This course aims to give in a practical way an appreciative understanding of what artistic costume means. It will be closely related to dressmaking problems in all phases. The subjects of line, proportion, balance and color harmonies are studied, from the work of designers as pictures in magazines, and by the handling of actual materials. Color is emphasized by making harmonious combinations suitable for different individuals. Alteration of designs, and choice of details for different individuals, will be emphasized from the point of view of the teacher of dressmaking, or the purchaser of the shop-made garments. The professional work of the course includes the place and character of costume design in a high school course, and the kinds and use of illustrative material to be procured. Prerequisites: Color and Design, Clothing III and IV.

Fee: $1.00. 1st Sem.; S. S. Credits: 3

INTERIOR DECORATION

The course is taken under two heads; first, the principles underlying good proportion and color harmony; second, the application of these principles to house planning and furnishing. The course is designed to enable the student to apply artistic and economic principles in determining appropriate and artistic furnishings and decoration of a moderate priced home, and to select from the house furnishings now on the market, such as wall papers, rugs, furniture, draperies, the most artistic and the best for the money expended. The professional side of the work is considered throughout the course with the idea that the student may teach the subject in high school.

Fee: $2.00. 1st Sem.; 2nd Sem.; S. S. Credits: 3

MILLINERY

Designing, making, and trimming of hats with a view to developing originality and skill, are the main purposes of this course. Stress is placed upon the artistic side of the work by the study of the harmony of color and line. Renovation of materials is given, also practice in construction of fabric and ribbon flowers and ornaments. Prerequisites: Color and Design I.

Fee: $3.00. 2nd Sem.; S. S. Credits: 2

THE CAFETERIA KITCHEN

MANAGEMENT

HOME MANAGEMENT

The course in Home Management is designed by means of class discussion, and related practical work at a practice cottage, to give students an insight into the organization and administrative work of the home. Budget making and account keeping are based on the work at the practice cottage. Sanitation, including heating, lighting, ventilation, plumbing, and the disposal of waste, are studied and discussed in their application to actual household problems. The house, as to its plan, construction, and equipment, is studied in its relation to initial expense, cost of maintenance, and efficiency in the work of the housewife. Consideration is given to the problem of organizing and relating subject matter, designated as Home Management, in the various courses in Home Economics given in the public or vocational schools. Prerequisites: Cookery II, Food Chemistry.

1st Sem.; 2nd Sem.; S. S. Credits: 4
(One of which is for Methods)

INSTITUTIONAL ORGANIZATION AND ADMINISTRATION

The purpose of the course is to acquaint women interested in the housekeeping activities of public institutions, dormitories, lunch rooms, cafeterias, and hospitals, with the principles and practices involved in the management of such institutions, so as to obtain the best results, within the organization, for the group of individuals concerned. Discussions are held on the different phases of the work, the qualifications and duties of stewards, superintendents, housekeepers, directors of halls, matrons, and laundry managers; the general organization of the work, including service problems, records, accounts, inventories, regulating of expenditures; planning and general care of building and rooms for specific purposes, study of dietaries; marketing; laundering; waste and refuse. Prerequisites: Cookery IV, Dietetics.

2nd Sem.; S. S. Credits: 2

CAFETERIA COOKERY AND MANAGEMENT

This course is planned for the purpose of those who wish to manage school lunch rooms, tea rooms and cafeterias. It includes the study of space required to handle a crowd quickly and efficiently, equipment, staff and employees, menus, service, cleaning and publicity. The work is based upon a knowledge of foods, balanced meals, plate luncheons and calorie portions. The laboratory work gives practice in all phases of cafeteria management, which includes large quantity cookery, stock room supplies and marketing. The work consists of lectures, discussions, demonstrations, laboratory work and actual practice in every department of the cafeteria. Institutional Organization and Administration must be taken at the same time. Prerequisites: Cookery IV, Dietetics.

1st Sem.; 2nd Sem.; S. S. Credits: 3

FURTHER INFORMATION

Inquiries regarding the purpose and character of work offered at The Stout Institute, the regular courses of study or those of the summer session, the Bulletin, and other publications of the school; or inquiries regarding the qualifications of Stout graduates for the teaching of special subjects, should be addressed to

PRESIDENT BURTON E. NELSON,
The Stout Institute, Menomonie, Wisconsin.

INDEX

	Page
Administrative Problems	42
Admission Qualifications	19, 20
Athletic Coaching	54, 55, 56
Athletic Council	16
Attendance, Continuous Advantages of	25
Auditorium	17, 18
Auto Mechanics	72, 73
Basketball Coaching	55
Bricklaying	68
Buildings & Equipment	14, 15, 16, 17
Building Trades	63
Cabinet-making	64
Cafeteria	23
Cafeteria Cookery & Management	86
Calendar	6
Carpentry	68
Chemistry, Food	49
Chemistry, General	49
Chemistry, Industrial	48
Chemistry, Physiological	50
Chemistry, Qualitative Analysis	50
Chemistry, Textile	51
Chemistry, Food Analysis	50
Citizenship	44
Clothing I	81
Clothing II	81
Clothing III	81
Clothing IV	82
Clothing V	82
Clubrooms	16
Color and Design I	83
Color and Design II	84
Community Hygiene	53
Cookery I	77
Cookery II	78
Cookery III	78
Cookery IV	78
Cookery V	79
Cookery, Cafeteria VI	86
Costume Design	84
Courses, General Information	19
Courses, Shop Work & Drawing—	
1. Selection	60
2. Credits	60
Courses of Study,	
Industrial Arts	35, 36
Household Arts	36, 37
Credits	20
Credits, Advanced	35
Credits, Shop Work	60
Degrees	35
Demand for Graduates	24
Design, Costume	84
Dietetics (see Nutrition)	
Diploma	35
Dormitories	22, 23
Drawing, Architectural	61
Drawing, Mechanical Elements of	61
Drawing, Machine	61, 62
Dressmaking (see Clothing)	
Economics	43
Education	38
Electrical Work	74
English Composition	58
English Directed Readings	59
English Literature	58
Enrollment, Literature	20
Equipment	14
Expenses, Living	22, 23
Faculty	7, 8, 9, 10, 11, 12, 13
Fees—	
Laboratory, Library & Shop	20
Examination, Special	22
Matriculation	20
Transcript	22
Foods	77
Food Study	79
Football Coaching	54
Forge Work	70
Foundry	70
Four-Year Course	35, 36, 37
Furniture Upholstery	66
Gymnasium	16
History, American	56
History, Contemporary	58
History, Industrial	57
History, Modern	57
Home and Social Economics	44, 45
Home Nursing	53
Home Management	86
Home Mechanics	75
Household Arts Building	17
Hygiene and Safety	52
Industrial Arts Building	14
Information, General	14
Inquiries	87
Institutional Organization and Administration	86
Interior Decoration	85
Laundering	83
Library	17, 21
Location	19
Machine Shop	69
Management	86
Materials of Construction	48
Mathematics	47
Methods, Industrial Arts	39
Microbiology	51
Millinery	85
Millwork	65
Modern Industries	43
Nutrition, I and II	79, 80
Observation	40
Officers of Administration	5
Organization and Purpose	18
Organization of Courses in H. E.	43
Organization of Industrial Arts	39
Pattern-making	69
Physics, Applied	47
Physics, Household	47
Physical Education	52
Physiology and Hygiene	52
Practice Teaching	40
Principles of Education	42
Principles of Teaching	40
Printing	71
Psychology I	38
Psychology II	38
Psychology of Childhood and Youth	38

Page

Public Speaking 59
Purpose and Organization..... 18

Railroad Connections 19
Reading Room 17
Refunds 23
Residence Requirements 19

Sanitation 52
School Year Enrolling..... 25
Sheet Metal Work and Pattern Drafting 73
Science 47
Sociology 43
Shop Work 60
Summer Session—
General Information 26
Enrolling 26
Variety of Courses..... 27
Vocational Teacher Training.. 27
Choice of Courses..... 28
Vacation Features 28
Summary of Courses....29, 31, 32
Expenses 29
Fees 29

Page

Refunds 30
Accommodations, Living 30
Swimming 53

Teaching Industrial & Vocational Subjects 39
Textiles 82
Thesis 60
Track and Field Coaching..... 56
Trades Building 16
Trustees, Board of..... 6
Tuition 20
Two-Year Course 35, 36, 37

Uniforms 24

Vocational Education 41

Woodfinishing 67
Woodturning 63
Woodwork, Elements of..... 63
Woodworking, Machine 65

Y. M. C. A..... 16
Y. W. C. A..... 16

CALENDAR FOR 1923-1924

Eighteenth Annual Summer Session begins
June 25, 1923—Ends August 24, 1923

Twenty-first Regular Session begins
September 10, 1923—Ends May 30, 1924

First Semester ends January 25, 1924
Second Semester begins January 28, 1924

Holiday Vacation begins December 20, 1923
Classes resume January 3, 1924